

# Michigan Farmer

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### Agricultural.

#### VARIOUS TOPICS.

##### FARMERS' INSTITUTES.

The time is approaching when the State Farmers' Institutes will be located, and the programmes announced. Every farmer, to whom this article will come with any force or value, will attend something of the kind in the next three months. Every county almost has an organization for the holding of local Institutes, and those that have not, should be worked into an enthusiasm in aid of the project by the readers of the FARMER. What I had to say particularly regarding the Institutes was that every farmer who expects to attend any of them should obtain a programme as early as possible, study it, and inform himself upon some one of the topics, so as to be able to make an intelligent argument, illustrate the sentiment by some experiment, giving facts and figures, or in some way, help to get at the bottom facts when the time is open for discussion. Too many farmers go as a kind of agricultural loafers; they absorb, but nothing can be squeezed out of them. Then others will relate on the way home, the facts regarding an experience of their own, touching some of the topics discussed, which would have been invaluable if it had been stated at the meeting. I never yet have looked over a programme for an Institute, but that on some of the subjects I knew something which seemed to me important to have brought out. I take it that when a person feels that way, it is his duty to prepare himself to push his point when the time comes. The investigation, of itself, is of as much value to the individual as the information he is likely to receive from the facts imparted by others, and he is likely thus to bring out the meat of the whole discussion.

While it is well to have large audiences, and good listeners, the mere listeners are apt to be largely in excess of the talkers. Persons who are called out often say, "I came to listen and to learn and not to talk." This is a very selfish expression when it is turned down to its real essence. It says, "I lack the information necessary to success in some things, and will go over to the Institute, where it is likely some fellow will hand out the very thing I am looking for, and I can get hold of it without offering to exchange any of my own ideas as an offset." A much better way would be, as I have intimated, to study the programme, can the lessons of your experience, and be prepared to state some facts that you know. Every year we are or ought to be trying or testing something new, and a good feature to a programme would be the question, "Have you tried any new plans, new tools or new methods on your farm the past season which have proved successful or otherwise?" This will cultivate and extend a spirit of investigation that will dispel a tendency to stagnation and sameness.

The capacity to do is born of a willingness to do, and the farmer who really desires the success of an Institute will shoulder some of its responsibilities and will surprise himself when he finds that he is really of service at such a gathering.

##### THRESHING CORN AGAIN.

I have been there and know how it is myself. I helped a belated neighbor yesterday in the forenoon. They threshed 94 bushels in a little more than two hours running time. Hauling the corn from the field and placing it on the threshing table is the only difficult task in the operation. This can be facilitated by binding in bundles at cutting time, the same as topped stalks are bound, so that the bundles can be handled with a fork instead of by hand. Some are running

their stalks through the machines, as being cheaper and more expeditious than cutting by a feed cutter, and they are in better shape for feeding. This plan of husking corn is likely to be adopted almost universally another year. I shall not set myself up as an expert at placing the corn on the table from a wagon unless it is bound; I tried yesterday to supply the cylinder alone as fast as it could gulp it down, by pulling it up with my hands. It is not a movement tending to cultivate a taste for leisure nor very long finger nails. The kernels are broken some as they come through, but for feeding there will probably be no loss. The stalks are shredded up in splendid shape for feeding, and that of itself is a valuable feature of the innovation.

##### SHEEP.

Every farmer who desired to get rid of his sheep this fall has had an opportunity to do so, at advanced values from a year ago. Feeding wethers have been very scarce and hard to get, and many who expected to feed have filled up with lambs. The stock of sheep for next year's shearing will be still further reduced. A good many car-loads have gone out of the State, and the reduction of numbers by feeding will have a tendency to create a sheep famine in the near future, and make the wool crop exceedingly short. Those who want sheep had better take hold while they are comparatively cheap, for if they wait another year those who have sheep may not want to sell.

A. C. G.

### AMERICAN MERINOS AT THE ANTIPODES.

It will be remembered that some four years ago a number of American Merinos were purchased by Australian sheep-breeders for exportation to that country. After a few had been landed the business was suddenly stopped by the passage of a law excluding further importations on the ground that some of the sheep were affected with scab. Some of those landed were burned, some were killed by using a sheep dip upon them so strong that they never recovered from it, while a few escaped and were cherished by their owners. From the Melbourne Argus, date August 24, we take the following editorial article on the result of the importation of the few American Merinos left alive by the prejudice and jealousy of the breeders of stock flocks in Australia:

"The Australian Sheep-Breeders' Show has generally some point of interest. It justifies its existence each year by teaching the sheep-breeders something worth learning. On this occasion the noteworthy feature is that the champion ram who has swept off all the prizes is a 'three-quarter bred' Vermont sheep, exhibited by Messrs. M'Farland Bros. of Barroona, New South Wales. This ram takes the prize from a splendid specimen of the Australian Merino, a great grandson of the famous Bellevue ram Sir James. The ram of Messrs. T. Dowling and son, of Jellalunga, has an almost perfect fleece of the highest type--bright and silky--of Merino wool, and but for the Vermont cross-bred he would undoubtedly have secured all the honors of first in his class, the special prize, and the championship, but as it is, these have gone to the more massive competitor. The success of the Messrs. M'Farland is assuredly a blow to the breeders who have persisted, with Mr. Curr, the Victorian inspector of stock, in affirming that nothing is to be gained by crossing the Australian stock, and that the exportation of stud animals should be strictly prohibited. When the discussion was in progress occasioned by the appearance upon the scene of the sheep of the Messrs. Harper--and by their precipitate disappearance from the scene also--we submitted that it was not wise to push this dictum to extreme lengths, and that while the ordinary importation of ordinary sheep might well be prohibited in order to guard against disease, yet the door should be left open for the admission of stud animals of new varieties when sufficient cause could be shown for their introduction. Every precaution should be taken, no doubt, but the position that the colonies are never to take advantage of outside strains would be shown by the present incident to be unsound. It is good for Australia, presumably, that the Messrs. M'Farland should breed such a ram as that which has won the championship, and should have a number of its kindred for sale, but if Mr. Curr and the prohibitionists had had their way this successful cross would have been unknown here."

From the report of the show in the same paper we take the following extracts: "There are 53 rams sent in by Messrs. W. Gibson and son, of Scotch. Among them are some remarkably high-class sheep that have been heavily used in the Scotch stud. The three rams by the American stud sire Squatter 2nd from Scotch ewes will attract the attention of those who are interested in the experiment of mingling the American and Australian types of Merino."

"Messrs. M'Farland Bros., of Barroona, N. S. W., have eight of their Vermont-Australian rams catalogued for sale. They are by the finest sires that could be obtained for money in America, and exhibit in their form and fleece all the benefit to be derived from the cross between the Vermont and Australian types of Merino."

"The executors of the late Mr. Jas. W. Dhuurghing, have sent in 18 rams by imported Vermont sires. They have very heavy fleeces, and like all the sheep of mixed American blood are remarkable good on the thigh."

"Two errors occurred in the prize list given yesterday. M'Farland Bros., of Barroona, New South Wales, gain the special prize presented by the New Zealand Loan and Mercantile Agency Company for the most valuable fleece ram in the show with their champion ram, and not Mr. J. Mack, as reported."

From all which we conclude that the Great American Merino will give just as good an account of himself as the antipodes as in the more favored land of his birth.

### GOVERNMENT EXPERIMENT STATIONS.

Text of the Bill Introduced into Congress by Hon. H. H. Hatch, of Missouri.

Hon. H. H. Hatch, of Missouri, introduced a bill into the 49th Congress for the establishment of a Government Experiment Station in each of the States, in connection with the Agricultural Colleges in the several States, under the following title: "A bill to establish agricultural experiment stations in connection with the colleges established in the several States under the provisions of an act approved July 2, 1862, and of the acts supplementary thereto." This bill is on the House Record as No. 2933, report No. 848. On Jan. 7, 1886, it was read twice, referred to the committee on agriculture, and ordered to be printed. On March 3, it was reported with amendments, committed to the committee of the whole house on the state of the Union, and ordered to be printed. On May 6, it was ordered to be re-printed. It was also introduced into the Senate, where it was discussed shortly prior to adjournment, and laid over until the next session. The bill is as follows:

#### LOCATION OF THE STATIONS.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in order to aid the Department of Agriculture in acquiring and diffusing among the people of the United States useful and practical information on subjects connected with agriculture, and to promote scientific investigation and experiment respecting the principles and applications of agricultural science, there shall be established, in connection with the college or colleges in each State established, or which may hereafter be established, in accordance with the provisions of an act approved July 2, 1862, entitled "An act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts," or any of the supplements to said act, or such college which has been or may hereafter be established and operated under the laws of any Territory in conformity with the provisions of this act, a department to be known and designated as an "agricultural experiment station;" Provided, that in any State in which two such colleges have been or may be established, the appropriation hereinafter made to such State shall be equally divided between such colleges, unless the Legislature of such State shall otherwise direct.

#### OBJECTS OF THE STATIONS.

Sec. 2. That it shall be the object and duty of said experiment stations to conduct original researches or verify experiments on the physiology of plants and animals; the diseases to which they are severally subject, with the remedies for the same; the chemical composition of useful plants in their different stages of growth; the comparative advantages of rotative cropping as pursued under a varying series of crops; the capacity of new plants or trees for acclimation with the isothermal limits represented by the climate of the several stations and their vicinity; the analysis of soils and waters; the chemical composition of manure, natural or artificial, with experiments designed to test their comparative effects on crops of different kinds; the adaptation and value of grasses and forage plants; the composition and digestibility of the different kinds of food for domestic animals; the scientific and economic questions involved in the production of butter and cheese; and such other researches or experiments bearing directly on the agricultural industry of the United States as may in each case be deemed advisable, having due regard to the varying conditions and needs of the respective States and Territories.

Sec. 3. That the said experiment stations shall be under the direction and control of the trustees or other governing body of such colleges, who shall have power to appoint a director and such assistants as may in each case be necessary.

#### UNIFORMITY OF WORK.

Sec. 4. That in order to secure, as far as practicable, uniformity of methods and results in the work of said stations, it shall be the duty of the United States commissioner of agriculture to determine annually a standard of valuation of the ingredients of commercial fertilizers, upon which the analysis of such fertilizers, as far as made by said stations, shall be based; to furnish forms, as far as practicable, for the tabulation of results of investigations or experiments; to indicate, from time to time, such lines of inquiry as to him shall seem most important; and in general, to furnish such advice and assistance as will best promote the purpose of this act; but nothing herein contained shall be construed to authorize said commissioner to control or direct the work or management of any such station except as to the standard of valuation of commercial fertilizers. It shall be the duty of each of said stations, annually, on or before the first day of February, to make to the governor of the State or Territory in which it is located, a full and detailed report of its operations, including a statement of receipts and expenditures, a copy of which report shall be sent to each of said stations, to the said commissioner of agriculture, and to the secretary of the treasury of the United States.

#### PUBLICATION OF RESULTS.

Sec. 5. That in order to make the results of the work of said stations immediately useful, they shall publish at least once in every three months bulletins or reports of progress, one copy of which shall be sent to each newspaper in the States and Territories in which they are respectively located, and to such individuals actually engaged in farming as may request the same and as far as the means of the station will permit. Such bulletins or reports and the annual reports of said stations shall be transmitted in the mails of the United States free of charge for postage, under such regulations as the Postmaster-General may from time to time prescribe.

#### APPROPRIATIONS--HOW SPENT.

Sec. 6. That for the purpose of paying the salaries and wages of the director and other employees of said stations, and the necessary expenses of conducting investigations and experiments and printing and distributing the results as hereinbefore prescribed, the sum of \$15,000 per annum is hereby appropriated to each State and Territory, to be paid in equal quarterly payments, on the first day of January, April, July and October in each year, to the treasurer or other officer duly appointed by the aforesaid boards of trustees to receive the same, the first payment to be made on the first day of July, 1886, but no such payment shall be made to any station until the trustees, or other governing body of the college at which such station is located shall have executed, under their corporate seal, and filed with the secretary of the treasury of the United States an agreement to expend all moneys received under this act for the sole and exclusive purpose and in the manner herein directed, to maintain a farm of at least 35 acres in connection with such college, and shall also have executed and filed with said secretary their bond, in the penal sum of \$15,000 with two sufficient sureties, approved by the clerk of a court of record in such State or Territory, conditioned on the faithful expenditure of and accounting for all moneys so received: Provided, however, That out of the first annual appropriation so received by any station, an amount not exceeding one-fifth may be expended in the erection, enlargement or repair of a building or buildings necessary for carrying on the work of such stations; and thereafter an amount not exceeding five per centum of such annual appropriation may be so expended.

#### MONEY DEDUCTED.

Sec. 7. That whenever it shall appear to the secretary of the treasury from the annual statement of receipts and expenditures of any of said stations, that a portion of the preceding annual appropriation remains unexpended, such amount shall be deducted from the next succeeding annual appropriation to such station, in order that the amount of money appropriated to any station shall not exceed the amount actually and necessarily required for its maintenance and support.

#### Sec. 8. That nothing in this act shall be construed to impair or modify the legal relation existing between any of the said colleges and the government of the State and Territories in which they are respectively located.

#### "IS IT RIGHT?"

##### NO. IV.

Our investigations have elicited one more response in the last FARMER, from Cyrus Lee. Being short and comprehensive we will reproduce it in full.

"Old Genesee inquires if a protective tariff is right, and wishes a direct reply. We say yes." Our little school of political economy now has a class of two, of which Mr. Bentley stands at the head. And now let us review. Mr. Bentley, instead of answering the question we asked, propounded three others; while Mr. Lee instead of answering our question, answered another of his own making. This is what we call evasion. Turn to my first article, neighbor Lee, which you will find on the first page of No. 38, Vol. 17, of the FARMER. You will find my question to read as follows: "Ought not the property of the country to support the government?" Please deal with it as you find it, for I do not propose to be drawn off my base. Having in my former article endeavored to show some of the workings of our great national taxing machine, we will now endeavor to look a little further into the same subject. But let it not be forgotten that I have shown from facts and figures that the popular idea of our revenue being drawn principally from luxuries, is a delusion. But before dismissing this branch of the subject let us look still a little deeper and see what becomes of the theory of "a revenue derived chiefly from luxuries." Tariff Commissioner, page 810. "Dutiable brass, copper, gold and silver, jewelry--lead--metals not otherwise specified, pens and pins, metallic tin, manufactures of watches, watch materials and zinc, 35 35-100 per cent.

Well, here we are, with cotton goods taxed, 37 per cent; iron, steel, etc., 40 63-100 per cent; sugars, 80 per cent; woolen goods, 63 33-100 per cent, making the average of these staple necessities 55 1/2 per cent. Turn now to the luxuries. Silk, the highest, pays 50 01-100 per cent; fancy articles, 37 31-100 per cent; gold and silver jewelry, 35 35-100 per cent; average on all these luxuries, 36 per cent. Summing the

whole matter up, after the most careful examination, the result may be briefly stated as follows: Total revenue of 1883 in round numbers \$210,000,000; collected on luxuries and fancy articles, \$80,000,000. Percentage of duty on necessities, 55 1/2 per cent; percentage on luxuries, 36 per cent. Discrimination in favor of luxuries, 19 1/2 per cent. It is not strange that the masses of the people do not understand this tariff business. Indeed it seems to be the business and object of tariff makers to render them so complicated that they cannot be understood by the masses of those who are taxed. Just turn to this Tariff Commission Report, and you will find that through its four hundred and odd pages, it is a perfect network of ingeniously woven complications.

In 1874 Professor Perry of Williams College delivered a lecture before the Nebraska State Agricultural Society, entitled "The Foes of the Farmer." In exposing the complications and sophistries of the tariff system, he makes this statement, "that there are by actual count just 756 rates of duty specified to be assessed on different things and classes of things," and from the best casual judgment I can make, the number has been doubled by more recent enactments, "specific" and "ad valorem," are rung on every imaginable change, and so constructed that they vary on every day's fluctuation of the markets. No less than 1,492 different things and classes of things were embraced in the schedule of 1873, and the number added by subsequent enactments will nearly or quite make up a total of three thousand. Turn to the article of steel, Tariff Commission, pages 280 to 282, and you will find it taxed under no less than 130 different heads, while page 275 tells us that said rates get off by being taxed only six times. It will no doubt be interesting to the two members of my class to learn (page 276) that sauerkraut, bologna sausages and sausage skins have all been placed on the "free list." Page 278 informs us that while calf skins are taxed 30 per cent, snails and the skins of asses, sharks and sausages are all duty free. This makes a free trade man draw a sigh of relief, but the cold sweat comes over him when he reads (page 277) that he must pay ten cents a pound for the privilege of buying foreign shoddy. But I will leave this shoddy business to be considered in another article. It is an item of greater magnitude than most people are aware of, and as almost everybody buys shoddy from our protected manufacturers, it becomes a subject of general interest.

#### OLD GENESSEE.

##### SHORTHORNS AT AUCTION.

The public sale of Shorthorns by Mr. M. Kelley, of Kelley's Corners, was held on the Brooklyn Fair Grounds on Saturday last. The weather was cold, and raw, and the selection of Saturday, which could not be avoided, was unfortunate, as it undoubtedly kept away many from a distance who would otherwise attended. The attendance was fair in numbers, but only a few breeders were present, with a number of farmers who are engaged in feeding stock. After hot coffee had been passed around--the only hot thing on the grounds that day except the stove it was cooked on--Col. J. H. Mann mounted the platform and addressed some preliminary remarks to those present upon the future of Shorthorns. It was hard getting up any enthusiasm in the face of the cold wind that seemed to go right through those present, and the prices obtained for the stock sold were very low. Among those in attendance we noticed Messrs. A. P. Cook and W. E. Randall, of Brooklyn, L. D. Watkins, of Watkins Station, J. S. Flint, of Kelley's Corners, Wheeler Brothers, of Homer, Mr. Ladd, of Grass Lake, A. A. Wood, E. Helber, and A. G. Townsend, of Saline, Wm. Steele, of Ionia, G. B. Rhead, of Norvel, Mr. Peckham, of Parma, Messrs. Croman and Raymond, of Grass Lake, C. F. Vining, of Brooklyn, A. G. Ayres, of Horton, J. F. Payne, of Addison, F. M. Palmer, of Bridgewater, G. Hitt, of Brooklyn, B. Laur, of Springville, E. W. Craft, of Grass Lake, and Mr. Bouldry, of Summit. The list of animals sold and purchasers is as follows:

#### FEMALES.

Duchess 43d of Woodhill, by Duke of Oxford 38th, out of Duchess 28th of Woodhill, by Imp. 20th Duke of Oxford (38718) a Beauty, by E. F. Vining, Brooklyn. Price, \$80.  
Lyon's Gentle Annie 2d, by 29th Duke of Hilldale 51078, out of Lyon's Gentle Annie, by 5th Prince of Argyle 40566, a Phyllis, to A. G. Ayres, Brooklyn. Price, \$100.  
Red Rose, by Erie 5105, out of Juliette 2d by Erie 5105, a Strawberry, by A. P. Cook, Brooklyn. Price, \$45.  
Red Rose of Columbia, by Grand River Duke 35701, out of Red Rose, by Erie 5105, a Strawberry, to F. M. Palmer, of Bridgewater.  
Duchess of Columbia, by Airtrie Belle Duke 54473, out of Red Rose, by Erie 5105. Croman & Raymond, Grass Lake. Price, \$45.  
Second Duchess of Columbia, by Airtrie Belle Duke 54473, out of Red Rose, by Erie 5105. F. M. Palmer, Bridgewater. Price, \$40.  
Nell 2d, by 5th Duke of Tecumseh, out of Nell, by Burlington 13574. C. F. Vining, Brooklyn. Price, \$30.  
Nellie Gray 2d of Columbia, by Bredelbane 2d 37792, out of Nell, by Burlington 13574. Wm. Steele, Ionia. Price, \$75.  
Nell 4th, got by Argyle 2d of Riverside 37470 out of Nell of Burlington 13564; G. Hitt, Brooklyn. Price, \$60.  
Nellie Gray 2d of Columbia, by Airtrie Belle Duke 54473, out of Nellie Gray 2d of Columbia, by Bredelbane 2d 37792; Wm. Steele, Ionia. Price, \$80.  
Red Beauty, by Airtrie Belle Duke 54473, out of Nellie Gray 2d of Columbia, by Bredelbane 2d 37792; Wm. Steele, Ionia. Price, \$85.  
Airtrie Belle Duke 3rd, by Duke of Mayflower 38487, out of Airtrie Belle 4th by 14th

Duke of Thorndale 8031; Croman & Raymond, Grass Lake. Price, \$110.  
Fifth Duke of Columbia, by Airtrie Belle Duke 54473, out of Red Rose of Columbia, by Grand River Duke 35701; Mr. Bouldry, Summit. Price, \$50.  
Sixth Duke of Columbia, got by Airtrie Belle Duke 54473, out of Red Rose of Columbia, by Grand River Duke 35701; B. Laur, Springville. Price, \$40.  
Captain Moore 5th, got by Airtrie Belle Duke 54473 out of Nellie Gray 2d of Columbia, by Bredelbane 2d 37792; E. W. Craft, Grass Lake. Price, \$40.  
Keller's Duke of Argyle, got by 6th Duke of Columbia (Vol. 32 A. H. B.) out of Keller's Miss Argyle by 29th Duke of Hilldale 51073; Wm. Steele, Ionia. Price, \$40.

#### PLEURO-PNEUMONIA.

##### Proclamation!

##### EXECUTIVE OFFICE, LANSING, MICH.

Whereas, pleuro-pneumonia, a contagious disease, is now prevailing among the cattle in the county of Cook, in the State of Illinois; and whereas large numbers of cattle are being brought into this State from said county of Cook, and there is danger that said disease will be communicated, and become prevalent among the cattle in this State;

Now, therefore, to guard against such danger, and in accordance with the provisions of Act No. 183, of the Session Laws of 1885, of this State, being "An act to provide for the appointment of a State Live Stock Sanitary Commission and State Veterinarian, and to prescribe their powers and duties, and prevent and suppress contagious and infectious disease among the live stock of the State," it is hereby ordered that no cattle shall be brought from said county of Cook, State of Illinois, into this State to be kept for feeding, or to be slaughtered therein, which have such disease, or have been exposed to the same.

On and after the first day of December, 1886, one or more of said Commissioners, or a competent veterinarian appointed by them, will remain in the city of Chicago for the purpose of inspecting all shipments of cattle consigned from said county of Cook to local points in this State, and no cattle shall be shipped into this State as aforesaid, from said points, without a written certificate and permit from one of said Commissioners or Veterinarian so appointed.

By the Governor, RUSSELL A. ALGER, Secretary of State.

#### PLEURO-PNEUMONIA AT CHICAGO.

A private note to the FARMER from the agent of the Michigan Live Stock Commission at Chicago, under date of November 17th, contains the following items of interest regarding the situation at Chicago:

"The situation here with regard to the cattle disease remains unchanged with this exception: The State Commission is now having an appraisal made of all the cattle quarantined as 'exposed or infected cattle.' They do not appraise sick cattle, as they cannot under the law pay for such. There are about 5,000 head of cattle in the distilleries and about the city that are under U. S. quarantine as having been exposed. New lots are daily found, and new cases are daily developed. Nevertheless the total sick, as compared with the number of cattle, is not large. The disease seems to progress very slowly. It is thought to have been in the distilleries for two years, and yet the mortality has not been such as to excite comment until it appeared in the cows that are kept in the outskirts of the city."

"I do not say this about the small death rate to indicate that I think it not a dangerous thing, but to show that like a fire it sometimes smolders a long time before breaking out. The State Commission will begin next week the slaughter of appraised animals, and will sell the meat of all that prove to be healthy, as no doubt a large proportion have not taken the disease."

"They have a big job on their hands, as it has extended all over the city where cows are kept, it being the custom to herd the cows on the commons during summer, where cows from different sections come in contact with each other."

"The movement of cattle from the stock yards to Michigan has not been heavy this fall."

"The cattle owners in the outskirts are quite uneasy about the quarantine and are frequently found trying to dispose of their cattle or moving them away, but there are now so many outside who are afraid of getting the disease, it is difficult to move without being detected."

#### HONORS FOR MICHIGAN CATTLE.

##### A Correction.

TOWPKINS, JACKSON CO., Nov. 26, 1886.  
To the Editor of the Michigan Farmer.

DEAR SIR--In the FARMER of Nov. 23, I notice a slight mistake in your report of the Chicago Fat Stock Show. That says only one premium was awarded to Michigan cattle; but that is a mistake, as I was awarded one first premium, in "lot 17, gain per day," on steer one and under two years of age.

Yours truly,  
FRANK A. TOWNLEY.

We make this correction with great pleasure. It was stated during the show that Mr. Townley's calf had been awarded sweepstakes for the greatest gain per day, but your report published so far gives Mr. Townley's steer credit for the premium awarded him. Those who saw this young steer at the State Fair will remember what a handsome, growthy animal he was, and will not be surprised at his carrying off the honors awarded him.

A REPORT from Chicago says the hogs slaughtered there by packers during the week amounted to 200,876, or within 13,000

of the number packed the same week last year. Receipts for winter season to date exhibit almost 214,000 decrease, while shipments exhibit 133,000 increase. The number of hogs packed is 345,391 less than during the corresponding period last year, owing to the recent strikes.

#### PAY FOR BUILDING LINE FENCE.

To the Editor of the Michigan Farmer.

Being a subscriber to your paper, I would like to ask through it how payment is enforced for making a line fence which the adjoining farmer will not build, he having only what the law allows him?

A SUBSCRIBER.

SHAPESBURG, Nov. 8, 1886.

The language of the statutes upon the point inquired about is clear and explicit, and we quote the sections specially referring to it:

SEC. 799. When any deficient fence, built up or repaired by any complainant as provided in the preceding section, shall be adjudged sufficient by two or more of the fence viewers, and the value of such repairing or building up, together with their fees, shall be ascertained by a certificate under their hands, the complainant shall have the right to demand either of the occupant or owner of the land where the fence was deficient, double the sum so ascertained; and in case of neglect or refusal to pay the sum so due, for one month after demand thereof made, the complainant may recover the same, with interest, at one per cent a month, in an action for money paid, laid out and expended.

SEC. 801. In case any party shall refuse or neglect to erect and maintain the part of any fence assigned to him by the fence viewers, the same may be erected and maintained by the aggrieved party, in the manner provided in this chapter. If the owner of the land where the fence was deficient, double the sum so ascertained; and in case of neglect or refusal to pay the sum so due, for one month after demand thereof made, the complainant may recover the same, with interest, at one per cent a month, in an action for money paid, laid out and expended.

SEC. 807. Upon the division and assignment as provided in the preceding section, the fence viewers may, in writing, under their hands, assign a reasonable time for making the fence, having regard to the season of the year, and if either party shall not make his part of the fence in the time so assigned, the other party may, after having completed his own part of the fence, make the part of the other, and recover therefor double the ascertained expenses thereof, together with the fees of the fence viewers, in the manner provided in this chapter.

SEC. 811. Where a petition fence running into the water is necessary to be made the same shall be done by equal shares, unless otherwise agreed by the parties, and in case either party shall refuse or neglect to make or maintain the share belonging to him, similar proceedings shall be had, as in case of other fences, and with the like effect.

SEC. 814. The overseers of highways of the several townships in this State shall be fence viewers in their respective townships.

SEC. 815. Any fence viewer who shall, when requested, unreasonably neglect to view any fence, or to perform any other duty required of him in this chapter, shall forfeit the sum of \$5, and shall also be liable to the party injured for all damages consequent upon such neglect.

SEC. 816. Each fence viewer shall be paid by the person employing him, at the rate of one dollar a day for the time he shall be so employed; and if such person shall neglect to pay the same within thirty days after the service shall have been performed, each fence viewer having performed any such service may recover, in an action of assumpsit, double the amount of such fees.

If the party has no property subject to execution, all that could be done would be to have the judgment recorded and wait until he could be reached. The interest would soon make a considerable claim and a farmer would be very unwise to have such a judgment hanging over him. But if he should choose to do so, the debtor would be able to escape payment so long as his property could not be reached by execution.

#### EXPERIENCE SHOULD BE THE GUIDE.

To the Editor of the Michigan Farmer.

Your paper is the most suitable place for the discussion of the tariff question, because it is purely a farmer's question at the present time.

For the first time in the history of this people, the issue between the political parties has been one that interested the farmers more than any other class. I hope the columns of the MICHIGAN FARMER will be open to the free-traders and protectionists alike, for it is about the only means by which the farmer can be enlightened regarding his interests.

When Cyrus Lee appears in your columns, let him come with something more than the short answer "Yes," to the question "Is protection right?" If it is right the farmer wants to know it by some substantial reason than the Bohemian old man gives when he takes a clear promissory note. He should know it at the end of a term of years of high protection without asking an agricultural college or tariff commission. The experience of every man is of great value to him if he interprets it aright. Why then this great depression in the midst of seemingly great prosperity? It can't be overproduction, for the wool and wheat crop has hardly been up to the standard the last two years. We must look beyond our farms, we must look to our country where we see the gates effectually closed against foreign commerce, closed about as good as a proclamation blockade could do it, and our boats rotting in their docks; workmen are idle all through the land; strikes are frequent and monopolies stronger. You do not need to look through a board of statistics to see this. It is your every day life. This state of things can be accounted for only by high protection.

PARMA, Nov. 23, 1886. SAMUEL CHAPPEL.



## The Horse.

### For Telling Horses' Ages.

The full-grown horse possesses 24 back teeth; that is, six in each side of each jaw; these are called molars or grinders. He has 12 front teeth; that is, six in each jaw. Mares have no tusks. The foal has either at his birth or shortly afterward eight milk teeth; that is, four in each jaw; at about 12 months two more milk teeth come in each jaw. These remain unchanged until he is three years old. The mouth of the yearling and two-year-old cannot be confounded. The yearling mouth shows no signs of use, and the corner teeth are shelly only; at two years old these teeth are strong and well grown, and the corner teeth filled up. A little before three years the two centre teeth of each jaw fall out and are replaced by permanent ones. A little before five the two remaining teeth are shed, and in their place come permanent ones. The upper milk teeth usually fall out first.

Thus the mouth is completed as to its front teeth; the corner tooth, however, is but imperfectly developed, being at present a shell only; this shell at six years old has filled up and is a complete tooth. This is the difference between a five and six year old. The tusks appear between three and a half and four years old, and they take nearly two years to arrive at their full growth. These teeth, as the horse grows older, get blunter and shorter, and so to an experienced judge are a sure indication of age. Up to six years old the mouth is in a distinct and periodical state of structural change. There is no difficulty in determining the age up to that date. After that the age must be judged by the shape of the mouth and the appearance of the teeth called the mark. At six years of age the teeth leave the two centre teeth above, at seven the next two above, at eight the outer corner teeth above.

At nine the two centre teeth below lose the cuts, at ten the next two below, and at eleven the outer corner teeth below. After a little practice the close observer can scarcely make a mistake. The changes that occur are the same in all horses, or nearly so. — *The Sportsman.*

### A Horse's Hind Legs and Shoulders.

Did you ever notice the pleasure a horse seems to get from elevating his forelegs? says a farrier. Leave your horse tied in front of your house five minutes, and he has his forefeet on the pavement and his hind ones in the gutter.

I asked a local horseman why that was, and he told me it was an action perfectly compatible with the "build" of a horse.

"A horse's shoulders," he said, "notwithstanding their strength are very delicate and very apt to become strained. The raising of the fore feet rests them, and throws the weight on the hind legs. In the stable a horse will always kick out a hole in which to put his hind feet, and those who study the comfort of their horses always make the front part of the stall higher than the back. Besides, this has a perceptible effect on the beauty of a horse, and the prettiest shoulders are always found on horses whose stalls are constructed in accordance with the animal's instinct. — *To, sonto Mail.*

### The Omnibus Horses of Paris.

According to a correspondent of the *London Field*, the manager of the Paris Omnibus Company states in his annual report that, since the company was formed, it has purchased 57,817 horses, all of which, with the exception of 1,278, were bought in France itself. Some years ago a trial was made of German horses, but it was found that they were as expensive as the French horses, and could not get through the same amount of work. The average number of horses purchased during the last few years has been 2,305, and most of these horses are of the Percheron type, costing about £40 each. The average length of their service is now nearly five years, and as 83 per cent of them are afterwards sold off at about £20 each—the rate of mortality being only 17 per cent—their actual cost is reduced by one-half. Formerly, nearly all the horses used in the omnibus service were entire, but the idea that more work could be got out of them than out of geldings and mares is exploded, and there are now about 4,000 entire horses, 4,100 geldings, and 3,900 mares in the company's stables.

### Fastest Trotting Time.

The fastest mile against time, 2:08½, was made by Maud S. by Harold. The fastest time by a gelding was 2:10 by Jay-Eye-See, and the fastest time by a stallion, 2:13½, by Maxey Cobb. The best mile in a race against other horses, 2:14½, was made by Maud S., and the fastest two consecutive heats, 2:11 and 2:10½, by Jay-Eye-See. The three best consecutive heats, 2:12, 2:13½, and 2:12½, is claimed by Maud S. The fastest three consecutive heats in a race against other horses is 2:16, 2:14½, and 2:15½ by Harry Wilkes. The best three consecutive heats by a stallion are 2:15, 2:14½, and 2:15½ by Phallas. The fastest time in four consecutive heats in a race against another horse is 2:19½, 2:15½, 2:17½, and 2:18½ by Phallas. Catchily won the first heat. For two miles the time is 4:43 by Fanny Witherspoon, and for three miles 7:20½ by Huntress. The fastest mile by a yearling is 2:36½ by Hinda Rose, and the best mile by a two-year-old is Wild Flowers 2:31. The three-year-old time, 2:19½, was made by Hinda R. se.

### The Saddle Sulky.

A doctor in New York is said to have invented and patented what he terms a "saddle sulky," the axle of which is curved to admit the rear of the horse between the wheels of the sulky, thus permitting the horse to turn upon the centre of motion, which he claims would make riding in such a vehicle much safer than in the ordinary style of sulkies. In many respects it is like riding in a saddle on wheels, as it is to all intents and purposes a part of the horse. The inventor claims that a vehicle of this nature will be of marked value, particularly for riding over rough roads, and for racing purposes it would largely prevent the slewing usually experienced in turning around the curves of a track, thereby tending to increase the speed of a horse and lower his record.

## Horse Gossip.

**ALLAN WILKES**, by George Wilkes, dam by Honest Allen, has been in training at Kalamazoo until recently, and his trainer says he can trot under 2:30.

**THE National Stockman** truly says: "If it is worth from \$50 to \$100 to be able to tell the buyer of your horse that he is from some noted sire, why will you object to paying a difference of a fifth or a tenth of that amount in service fees? This is something worth thinking about."

**MR. R. SWIGERT**, of Kentucky, has purchased the English race-horse Kingcraft to head his breeding stable. Kingcraft was sired by King Tom, dam Woodcraft. The price paid was \$17,500. Kingcraft won the Derby in 1870, and he is not only highly bred but has proved himself a great race horse. Mr. Swigert had just lost imp. Prince Charlie, and Kingcraft was purchased to supply his place.

**MR. J. R. HAGGIN**, of California, has imported from Australia the famous race-horse Darebin, thought by many to be the greatest horse ever bred in Australia. He was sired by The Peer, and his dam, bred also in Australia, was by Trader, and grand dam by King Tom. Darebin's last race was for the Sydney cup, which he won with great ease, carrying nine stone eight pounds (134 pounds.)

The horse trade in Texas has grown to very large proportions. Five years ago the number of horses sent from that State did not exceed 5,000 head. Shipments from San Antonio for 1886 foot up more than 50,000 animals. From the whole State at least 75,000 will be exported this year. Within the next few years the sale of Texas-raised mules is going to be a big item in our export trade. — *Inter-Republic (Texas).*

**OBSERVER**, in the *National Live Stock Journal*, says: "The Arabs placed more dependence upon the dam than the sire." The Americans have reversed the Arabian rule, and place the most dependence upon the sire." We think Observer is wrong in saying the Arabs placed more dependence upon the dam than the sire. Most writers upon the subject state that the breeding of the stallion is more carefully looked after by the Arabs than that of the mare.

It is noted by Canadian papers that officers of the British army are in Canada West and British Columbia engaged in selecting horses for the army, but that the style of horse required is not plenty. The requirements are that the horse shall be from four to six years old, good color—black or gray preferred—15 to 16 hands high, and broken to the halter. For such horses they are paying \$150 per head. It is said to require 40,000 head of horses yearly to supply the wants of the British army, and that horses suitable always find ready sale at a fair price.

Is this a JOKE?—The Gosper Horse and Cattle Company have chartered a train of 20 cars to bring their live stock interests from Kansas, which is expected this week at the junction. It consists of one car of red Durham bulls, a Clydesdale trotting stallion with a record of 2:33, a thoroughbred mare for breeding, two miles of piping, household furniture, and many articles for range purposes. The piping will be used to convey water from the Coyote springs to the ranch for stock and irrigation purposes. The company will have the stallion for public service, and we hear, will be reasonable in price. Costly improvements will be made in the range, and it is Major Witherspoon's intention to be ranked by none in range progress. — *Hog and Horn.*

A Clydesdale trotting stallion is certainly a wonder; but the Southwest is liable to produce anything, and possibly Clydesdale stake to trotting at 2:33 gait after breathing Arizo air. It is well that Hoof and Horn explains what the stallion is to be used for, as some people might think he was intended for household furniture or piping purposes in connection with these costly improvements.

**THE Potato Crop.** From the November report of the U. S. Department of Agriculture we take the following regarding the potato crop:

The area devoted to this crop shows a slight increase over that of last year, exceeding 2,240,000 acres. The extension, while slight in nearly all the States east of the Mississippi River, was considerable west of it—much greater than the increase of population in Kansas, Nebraska, California, Dakota, and some other States and Territories. In New England and New York there was a slight reduction, due to the unfavorable returns of the crop of the previous year. In the Atlantic and Gulf States, where the previous crop was more satisfactory, there was an enlargement ranging from one to five per cent.

## The Farm.

### Unfavorable meteorological conditions

have attended the crop almost from the beginning. Planting was delayed in many States by excess of moisture, causing some seed to rot in the ground, and inducing a too rank growth of the vines of the early crop; in other sections drought interfered with the germination and growth of late planting. Condition low on July 1; declined rapidly during the month, the injury being wrought by local droughts, beetles, and, in portions of the South, by excessive rains and overflows on low lands. The month of August was marked by a further falling off, the reduction being the greatest happening in that month since 1882. The report then said that there was "little probability of any rally before harvest, as condition has almost invariably further declined" during the latter part of the season. This was fully verified, the last report of condition (October) standing at 81, the lowest with but three exceptions during the nineteen years of crop reporting. This was one point lower than the previous crop, a small one at the same date.

The present returns are of yield per acre, the average for the whole country being about 73 bushels, against 85.8 for the crop of 1884, 91 in 1883, and 78.7 in 1882. This indicates a product of about 165,000,000 bushels, or the smallest crop since 1882. The conditions of the last year are almost exactly reversed; then the East was the section of the poor crops, and the West supplying the deficiency; now the yield in New England, New York, and Pennsylvania is but a few bushels below an average, while that of the West is so low that potatoes are shipped westward for consumption there.

The great part of the damage was done by drought, though there were local complaints of injury more or less serious from Colorado beetles, grubs, and scabs. In the

### Operation of Land Plaster.

A farmer in Wisconsin calls Prof. Armsby to account for stating, in a bulletin of the Wisconsin Experiment Station, that land plaster does not derive its value from anything it takes from the air, and that its action is an indirect one, wholly on the soil; and in so far as lime and sulphuric acid are deficient in the soil, it acts directly as plant food. Prof. A. states in reply to this correspondent, and in support of his position, that "it is a demonstrated fact in science, that the soil itself, without any addition of plaster, is abundantly capable of fixing the ammonia of the atmosphere, whether that conveyed to the soil in gaseous form by the atmosphere itself, or that dissolved out of the air by the rain and thus carried to the soil." And again, Prof. A. remarks, "the amount of ammonia which the soil can receive from the air is apt to be over-estimated. The proportion of ammonia in the atmosphere is variable, but may be put down roughly as one part in fifty millions. We may compute that the air over an acre to the height of 750 feet would contain ammonia enough to make about an ounce of dry clover seed. The amount of ammonia carried into the soil in rain during a year, was estimated by Lawes & Gilbert at 2½ pounds an acre in a year."

Prof. Armsby further states in substance that the action of the plaster in retaining the ammonia of manure is a different matter. The ammonia in manure is a volatile carbonate, and when the sulphate of lime is brought in contact with it, if in the presence of water, a chemical change takes place. The lime unites with the sulphuric acid to form sulphate of ammonia, which is not volatile and does not escape. If this compound be dried, the reverse action taken place, and the ammonia then escapes as a carbonate.

### Apples Drying off Cows.

A milk producer in Lowell who has been feeding two cows at the rate of one to two pecks of apples per day, finds the cows decreased heavily in their flow, and he therefore cautions farmers against feeding apples to cows in milk. The suggestion is a wise one, for excessive feeding of apples will

section west of the Alleghenies the early crop was generally superior to the late planting, the extended dry weather in Indiana, Illinois, Wisconsin, Iowa, and Kansas proving less injurious to it. The crop of the Southern States is but little under an average, while that of the Pacific slope is light.

Rot, which caused such serious damage last year after the crop was dug, has been equally widespread this season, but less virulent. As usual, it is much worse in low and badly drained soils, though it is spoken of in some sections as being induced by the heat and parched condition of the ground. It is especially complained of in Missouri and Kansas, deteriorating condition after the crop is harvested, and less serious in parts of Indiana, Illinois, Ohio, and New York.

### An Ear of Corn.

Nothing is more familiar to a farmer than an ear of corn. All his life, from childhood up, he has husked it, fed it to stock, or shelled it for the mill; and yet beyond the mere external features of color and size, he has scarcely made an observation. He knows that his cornstalk must have a tassel and the ear a silk, but why either is necessary, he seldom inquires. But in all this there is nothing extraordinary. Men are not in the habit of studying carefully the things that belong to every-day life. Familiarity begets carelessness of observation. To-day we invite our readers, especially the boys and girls, to the study of an ear of corn. Our older readers may join the class if they choose.

An ear of corn consists of a cob with a central pith, the grains attached to this cob and the husk enveloping the whole ear. These parts are arranged in perfect order. This pith is in the center of the cob and is the medium through which the material for the nutrition of the grain is conveyed to it in the processes of growth and ripening. The grains are connected with the pith by a ligament, or cord passing through the woody part of the cob. They appear to come off from the pith in pairs, and each pair of grains, in rows extending the whole length of the ear, appear to form a longitudinal section of the cob. By this arrangement every ear has an even number of rows, a fact which many people have observed, who cannot tell why it is so.

Horace Greeley, the philosopher and one of the most careful observers of this age, was betrayed into a blunder at this point.

In describing the large corn which he saw at the Indiana State Fair in 1855 he says: "Many of the ears had 25 rows of grains on them." Had the philosopher studied the attachment of the grains to the cob, he would have written more wisely.

Each grain consists of a germ, or rudimentary plant, and a bulky deposit of starchy substance which in botany is called the albumen. The germ is placed at the lower part of each grain and on the front side, or that which looks toward the outer end of the ear. To this germ is attached a fiber of silk, so that the number of fibers in the silk exactly represents the number of grains in the ear. Each of these silk fibers is a pistil in the corn flower, while the stamens of the flower are in the tassel. If by any accident, a silk fiber is destroyed before it receives the pollen dust from the tassel, the grain, the rudiment of which it was attached, will be a blank on the cob.

The husk answers to the chaff in other grains, the remarkable difference being that in the cereals generally, each grain is furnished with its own envelope, or husk, while in the ear of corn the chaff envelops the whole group of grains. It is probable that originally corn conformed to the general law in this respect, and that the present arrangement is an acquired condition, the result of transformation under changed circumstances. There is a variety of corn produced in Mexico and Central America which still retains the husk enveloping each grain.

The point of special note in this study is the remarkable uniformity and order that is maintained in the arrangement of these several parts in a plant, the most flexible and liable to change of any that we cultivate; and the fact that the pith of the cob is the reservoir from which every grain draws its nutriment. — *Indiana Farmer.*

### Agricultural Items.

In Manitoba farmers are punishable by fine who allow certain plant pests to flourish in their holdings.

LIBERAL feeding of the soil is as essential as the feeding of stock—one cannot do without it.

The stomachs of several cattle which died near Whitmore, Ia.; were found to be lined with mud taken in with the filthy water they were compelled to drink.

A CORRESPONDENT of the *Indiana Farmer* figures that if he can raise 75 bushels of merchantable potatoes and 13 bushels of culls to the acre, and get 50 cents per bushel for the good ones, he can net \$30 per acre at the business.

THE Bohemian Grain and Cereal Company, of Ypsilanti, this State, is included by the *Rural New Yorker* in its list of frauds, its agent having got into trouble at Rochester, N. Y. Michigan farmers have often been warned to beware of this business.

PRINCESS, the fine English hackney mare, recently died suddenly. She had been carried about from one show to another, spending most of the time in the cars, the stall and the show ring. High feeding for months without proper exercise had made the horse "soft."

When turned into the pasture on returning from a show, she was so glad to be at liberty that she spent the first hour trotting at full speed up and down the pasture. This in her "show" condition, engendered a chill which resulted in inflammation of the lungs, and death.

Eighty-three tons of Louisiana sugar cane were treated by the new diffusion process so successful with sorghum, at the Fort Scott, Kas., sugar works. The cane was shipped there with a view to ascertaining whether the yield of sugar might not be increased by the new method of handling, and the results were very satisfactory, the increase being 40 pounds to the ton, of fine quality sugar. New factories will at once be erected, in consequence of this discovery, and sugar cane will find sorghum a formidable rival.

A CORRESPONDENT of the *N. Y. Tribune* says: "An exceedingly useful tool, which should be on every farm, is a coal shovel. I mean those long, flat-bladed shovels—mine has a blade 14 inches wide—which are used for handling coal. One who has never owned one will be surprised to see how many uses it can be put to. It is excellent for handling potatoes, as it never cuts them, and more

surely cause injury to the cows. Sometimes they are entirely dried off, and occasionally the results prove fatal. But if fed judiciously apples are most excellent food, increasing the milk of cows and making good beef of dry cattle. Our Lowell contributor asserts that whoever says that one to two pecks per day will benefit a cow, makes a false statement; but he should remember that cows are not all of a size, nor are they all alike in other ways. Many persons have fed those quantities with excellent effects, which would seem to prove his statements untrue. The writer has fed a great many bushels of apples to dairy cows, giving them all they would eat, without experiencing any evil therefrom, but only small quantities were given at first, and the quantity was increased quite gradually. We found few cows that would eat two pecks per day very long, unless they were fed lightly upon other food.

We have known cattle running in orchards where apples were abundant, to become very fat and make excellent beef. We have used excellent milk for several months past that was given by a cow that has been fed liberally on apples, both sweet and sour, and no evil effects whatever have been produced. Every farmer should, if possible, feed out all his windfall apples to some kind of live stock, both for the benefit of the animals and for destroying the apple insects. — *N. E. Farmer.*

### Planting Potatoes.

A correspondent of the *Stockman and Farmer* says:

"In planting potatoes the first thing to consider is the soil, which should be a rich clay, well drained, and of moist nature. Next in order would be to plow deep and harrow or drag as fast as plowed. This will make the soil hold its moisture and keep it from getting cloddy. I would recommend clover seed, with as much barnyard manure as could be obtained. I would not recommend commercial fertilizers for potatoes; sometimes they show good results and sometimes they do not. Stick to stable manure, unless you know by experience that fertilizers will pay on your farm.

"Farmers as a rule do not take pains enough with their plowing. I am convinced I can get more clear cash from an acre that is well plowed than I can from an acre that is only half plowed. What I mean by only half plowed is, where it has been plowed by furrow, deep here and shallow there, a wide guess here and a narrow one there, with the furrows standing on edge, or turned over very flat. We can do good plowing just as easily and just as fast as we can 'hog' it over. When dry enough—and be sure to wait until the soil is dry enough to pulverize nicely for potatoes—plow deep and work the ground down fine and mellow, before it dries out. The Acme harrow will prepare the soil nicely, if you get on it and ride, and do so as soon as the plowing is done.

"After the ground is plowed and harrowed ready for planting, take a two horse riding cultivator and put on two shovels, so they will run the desired distance apart. In this way you can mark out two rows at a time. If your land is clean, plant in drills; if not plant in hills. No farmer should allow his land to become so foul as to necessitate his planting in hills for that reason. I think that by planting in drills we can average a much larger yield per acre, and as our object should be to make our land produce the largest crop on the same amount of land, by drill planting we would attain that object. My plan is to plant my potatoes in drills three and a half feet apart, and eighteen inches apart in drills; and I think I can raise one-third more potatoes per acre this way than in hills, and with but little more trouble to keep down weeds. Follow after the marking-out cultivator, dropping pieces eighteen inches apart; then follow with the cultivator, set as you would to fill up the potatoes. By this plan you turn or throw the dirt back, filling up the furrow nicely, then roll with the roller, and your planting is done."

For the roof of the poultry house, Stephen Beale says: "I have sometimes made a very cheap roof covering, and also used the same for the sides of wooden houses, by first tarring the wood, and then while it was wet laying on sheets of brown paper, tarring the whole over again two or three times. This, if each coat is allowed to dry before the next is put on, makes a splendid covering."

THE *Kansas Farmer* advises us that there is just as much more money in good fowls, accordingly, as there is difference in value between good and poor stock. One variety of fowls will excel another in one or more respects. Some are good layers, others are good market fowls. The mongrels are usually "birds of feather," in the same sense that a grade hog is a "rail-splitter."

If there is any good in having blooded fowls, there is just as much, good in having blooded hogs.

A CORRESPONDENT of the *Country Gentleman* says: "When I was a lad and first had the care of poultry, I used to be bothered with the gaps until I began using salt. I do not remember having a single case of the gaps in over twenty years; so I think it is a sure preventive, if taken in time. Salt the feed as if you were going to eat it, unless you chew tobacco; if you chew, you might get in more than is necessary, for tobacco-chewers generally use more pepper and salt in their food than temperate people. For cholera, before the fowls get it, and when hot weather comes on, dissolve some copperas in water in an old dish, and mix that with the water that is given to the hens, so that it tastes quite brackish. Alum will do if you cannot get copperas, but I prefer the latter. I give it to my hens every few days, and they are healthy and lay the year round, and at present their combs are a nice bright red, which is a sure sign of good health. If the tips are slightly purple there is danger; and if you do not have copperas or alum, take nearly a handful of ordinary condition powder, such as you feed your horse, and stir it, in about a peck of feed if you have quite a flock, and less if you have only a few fowls. If you do not have any of the above, get white oak bark, steep it till quite strong and give them. At all times keep good clean water for your poultry to drink. Cold tea is good for poultry, such as is left over from supper; give them the leaves also where they are in yards.

speedy and convenient than a scoop for shovelling chaff and sawdust; we have abolished all other shovels from the stable, as we can scrape out the stalls and clean the stable so quickly with this.

PROF. SANBORN, of the Missouri Agricultural College, says: "The Fultz among 150 varieties tried, has been retained for field use as our best wheat for upland soil, when all points are considered. The Clawson, Bennett, White Rogers, Spark's Swamp or Mediterranean have proved to be great yielders on this soil. Each one of these, on the score of yield, ranks the best with us, though no better than the Fultz for the average year. I occasionally hear it remarked that the Fultz is running out. My experience leads me to believe that it is the farm, and sometimes the farmer, that is running out. At the college farm we select the heaviest, plumpseed seed, rotate our crop, following clover or wheat, and yard our cattle and manure our crop."

## The Poultry Yard.

### Cause of Gapes in Fowls.

The prevalent disease of poultry known as "gapes" is more destructive than all others which affect these birds together. In places it is found impossible to rear chickens, every one dying at an early age from the suffocation caused by the presence of these parasites in the bronchial tubes. This serious trouble is due in a great measure to the general absence of knowledge in regard to the nature of this disorder and the conflicting testimony of those who suffer by it. The character of the disease is well known to scientific experts, and from this knowledge a very effective method of prevention may be practiced; cure, however, is troublesome and uncertain. The cause of the disease is a parasitic worm once named *Strongylus flarida*, but now known as *Syngrapha trachealis*. And just here arises difficulty number one, for as soon as ordinary persons have become acquainted with the pest by its former name some newly fledged professor, jealous of all antecedents, gives it a new name, and thus leads to the supposition that some other creature is referred to and the public confidence in scientific statements is destroyed. The parasite, however, is the same although it may have two names, and, knowing its habits its attacks may be evaded.

All young animals are subject to the attacks of the parasitic bronchial tract worms; but young chickens, turkeys, quail, partridges, (or pheasants,) lambs, and calves suffer most from them. The worms inhabit the bronchial tubes or air passages of the throat or trachea, and causing, by the irritation of their motion, a secretion of froth in which they gather in bunches, they greatly impede respiration, until the animal gradually pines away for want of the necessary supply of air and oxygen to the lungs, and they finally perish. Birds gasp and stretch their necks; lambs and calves cough and gasp for breath; but, unless helped by proper remedies, they invariably die, and in some cases it is found impossible to rear these animals.

How the pests gain access to the throats of their victims is an unsettled question. From the best knowledge had as to the habits of the worm it is supposed that they infest older animals more or less and live and mature in the intestines of these. Being discharged in the excretions from the bowels, when mature and filled with eggs, the eggs are dropped upon the ground or the grass and are picked up by the young animals, when they are hatched and produce the young worms. These crawl from the stomach up the gullet to the throat, where they remain and pass the early stage of their life. This theory is substantiated by the certain knowledge that no young animals are affected except those which pasture or feed upon ground that has been run over or soiled by older animals. — *N. Y. Times.*

For the roof of the poultry house, Stephen Beale says: "I have sometimes made a very cheap roof covering, and also used the same for the sides of wooden houses, by first tarring the wood, and then while it was wet laying on sheets of brown paper, tarring the whole over again two or three times. This, if each coat is allowed to dry before the next is put on, makes a splendid covering."

THE *Kansas Farmer* advises us that there is just as much more money in good fowls, accordingly, as there is difference in value between good and poor stock. One variety of fowls will excel another in one or more respects. Some are good layers, others are good market fowls. The mongrels are usually "birds of feather," in the same sense that a grade hog is a "rail-splitter."

If there is any good in having blooded fowls, there is just as much, good in having blooded hogs.

A CORRESPONDENT of the *Country Gentleman* says: "When I was a lad and first had the care of poultry, I used to be bothered with the gaps until I began using salt. I do not remember having a single case of the gaps in over twenty years; so I think it is a sure preventive, if taken in time. Salt the feed as if you were going to eat it, unless you chew tobacco; if you chew, you might get in more than is necessary, for tobacco-chewers generally use more pepper and salt in their food than temperate people. For cholera, before the fowls get it, and when hot weather comes on, dissolve some copperas in water in an old dish, and mix that with the water that is given to the hens, so that it tastes quite brackish. Alum will do if you cannot get copperas, but I prefer the latter. I give it to my hens every few days, and they are healthy and lay the year round, and at present their combs are a nice bright red, which is a sure sign of good health. If the tips are slightly purple there is danger; and if you do not have copperas or alum, take nearly a handful of ordinary condition powder, such as you feed your horse, and stir it, in about a peck of feed if you have quite a flock, and less if you have only a few fowls. If you do not have any of the above, get white oak bark, steep it till quite strong and give them. At all times keep good clean water for your poultry to drink. Cold tea is good for poultry, such as is left over from supper; give them the leaves also where they are in yards.

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THE GOOSEBERRY AND CUR-RANT SAW FLY.

Prevention and Remedies.

**Prevention.**—The best mode of prevention is to destroy the grubs while in the ground, and this may be done by deep cultivation round the fruit bushes with a spud, and by the application of copious dressings of fresh lime, or gas lime, or pure pungent soot, worked well into the soil. The clouds thus dug up should be well knocked to pieces with the large eyes of "prong hoes" so as to dislodge the cocoons within them. This operation may be performed between October and 1st of March, and after this the ground may be beaten down hard with spades, or trodden down hard, to prevent the escape of insects. All this would only be done of course after a severe attack of grubs in previous spring. In gardens or small plantations other means may be adopted, such as soaking the ground around the fruit bushes with liquid manure and removing the soil near them. These methods can hardly be carried out in large plantations.

**Remedies.**—Quicklime powdered upon the fruit bushes early in the morning before the dew is off the leaves is a very useful remedy. Syringing the bushes with a strong wash of water and soft soap, consisting of from ten to twelve lbs. of soft soap to one hundred gallons of water, is an admirable remedial measure. The essence from half-a-pound of tobacco may be mixed with this, or better still, the bitter extract from four or five pounds of quassa chips. Petroleum soft soap may also be used at the rate of half a gallon or three-quarters of a gallon to one hundred gallons of water. Paraffin oil in the proportion of a wine glass to three gallons of water has been found to remove the grubs, but if applied when the young gooseberries are formed this is said, or fancied, to have imparted some of its flavor to them. Washing or syringing a large plantation would be a tedious work. Fortunately the grubs generally appear here and there in patches, and not simultaneously upon a large area of fruit land. They should be taken in time. Directly a bush is seen to be infested active measures should be adopted, and when it has been limited or syringed the ground beneath must be hoed, or well stamped down to kill the grubs which have fallen off. As there are two broods in some cases care will be required that none of the grubs that fall escape. Heliothrips, *Veratrum*, sprinkled in the form of powder upon the fruit bushes has a good effect in clearing off the grubs. This is a deadly poison, and if any of it remained upon the fruit serious consequences might ensue. There are records of persons having been made seriously ill from having partaken of fruit after the had bushes been dusted with powdered heliothrips. Gooseberries are picked very young and green for tarts and preserves, and it frequently happens that a portion of the crop of each bush in large plantations is picked green for these purposes if the price is good, so that it would be highly dangerous to apply heliothrips even in these early stages. Heliothrips is used extensively in America as a remedy against this and other insects. Natural enemies have been created against this insect, as against many other insects that are destructive to crops. Among these may be cited the ladybirds, *Coccinella*, which eat the eggs, and have been seen attacking the grubs in their various stages. Also the larva of the *Chrysopa perla*—the Golden Eye, or Lace-wing, a fly of the *Neuroptera* and the family *Heurobiidae*—have been noticed devouring the grubs just after they have come from the eggs. There is also an ichneumonid fly of some species which deposits its eggs in the eggs of the *Nematodes*, as may be evidently seen by the dark color under their transparent skins. In America, Professor Riley discovered a similar parasite upon the *Nematodes ventricosus*, a species allied to the *Nematodes ribesii*. This he called *Trichogramma pretiosum*. Professor Lintner also confirms this. *Prof. Whitehead*, in *Horticultural Times* (Eng.)

**Failure and Success in Peach Growing.**  
In 1880 we were desirous of engaging in the culture of the peach. Our soil was too rich, and when burned, to make a passable brick. We were advised (advice is always cheap) that our soil was unfitted for the peach, and that no matter how often we tried, our best efforts would result in failure. True, peaches did not naturally thrive in our soil from some cause or causes, and we never saw even a tree of natural fruit live long enough to mature a single crop.  
We do not believe in the word failure. We tried, what all said we could not do, i. e., to successfully grow the peach. We began, as we have always advised our readers, on a small scale, planting only sixteen trees, fourteen of these, before the year was out, died naturally and easily of the yellows, or something like them. The other two looked very sickly, but gave an appearance of a remaining year of life. We thought we had gone far enough in peach growing and halted a year to investigate the causes of our failure. We studied the subject carefully, and learned among other things, that no matter how barren the soil, the peach tree that was planted near the house where it received a copious supply of dish-water, sweepings, ashes, and the like, flourished for many years, while trees only a few feet distant not receiving the same treatment were miserable failures. We also found that the storm of October 23, 1878, which caused the waters of the Delaware Bay to rise far enough to cover five or six feet deep, for several hours, some of the peach orchards in our vicinity, killing oak and other timber, was, also, supposed to be fatal to the peach tree. Many of the orchards that were overtopped were suffering from the yellows, and were considered worthless. Some growers thought of grubbing up their trees, supposing them to be ruined by the salt water that had overflowed. The following spring, 1879, they began to show an unusually vigorous growth, and the salt water instead of injuring them gave them increased life and vigor, showing no signs of failing in its good effects the three following seasons. We also, found those orchards that grew nearest the salt meadows had always been the most healthy and long lived, and also, those farmers who manured their orchards

with manure made from salt hay were the most successful.  
In carefully examining the matter we believed that if we should apply salt as was done by the overflow, caused by the storm, or potash in some form, as shown by the health of the tree near the house, that we could grow peaches. In looking for a fertilizer to supply the deficiency in the soil we thought we could find it by the use of either ashes or the German potash salts. We were sufficiently encouraged to again try peach culture. In 1881, we planted forty additional trees and manured them with heavy applications of kainit at the rate of one ton per acre. On some we used unleached hard wood ashes, from eight to twelve quarts per tree. The trees all grew finely; those fertilized by the kainit grew the best, and were very promising until a mistake made in digging the earth away from them in the fall as recommended by some writer, caused the water, during winter, to stand around them. This, freezing, ruptured the bark and killed nearly half of them. We manured again with kainit and bone dust. One-half ton of kainit and a quarter of a ton of bone per acre. In 1883 we were sufficiently encouraged to plant 200 more trees, some of which grew four feet the first season. Those who were so sanguine that we could not grow the peach were now sure that although we had succeeded in growing the trees we could not fruit. This we did not believe. Our trees formerly planted were healthy, vigorous and growing luxuriantly. In 1884 we planted 1,500 trees, using the same fertilizers with the addition of a hundred pounds of nitrate of soda. All the trees we planted were the refuse of a nursery and considered worthless for planting. With less than one-half dozen exceptions the whole 1,500 made a growth the first year from four to six feet, stout and thrifty. In 1885, our first planted trees began to fruit, which was very satisfactory. The present year all the trees are making wood rapidly. Four year old trees have made this season four feet of new wood, besides carrying a large crop of fruit, but no signs of yellows appear. We propose the coming spring to plant still more largely, using the same fertilizers and treatment of the orchard as we have for the last six years, believing that with us as it would be with others, the means we have employed in peach culture, will be successful. *—Farm and Garden.*

**The King of American Fruits.**  
The apple is full of vegetable acids and antiseptics—enemies to jaundice, indigestion, and that dreaded member of the human system, a torpid liver. It is a gentle spur and tonic to the whole biliary system. Chemists also tell us that the apple contains a greater per cent of phosphorus than any other fruit or vegetable—which makes it a proper food for the scholar and sedentary man, feeding his brain, and stimulating his liver. This was probably the view taken of the apple by that good old clergyman of whom John Burroughs tells us, who, on pulling out his pocket handkerchief in the midst of his sermon, pulled out with it two bouncing apples, that went rolling across the pulpit floor, and down the pulpit stairs. These apples were, no doubt, to be eaten after the sermon, on his way home—they would take the taste of it out of his mouth. Then, beside, it would be impossible for a minister to grow dull or tiresome with two big apples in his coat-tail pockets. He would naturally want to hasten along to "finally," and the apples. Moreover, we must not forget that the apple is full of sugar and mucilage, which make it highly nutritious. The English export the apple in the highest terms. Mr. William Robinson, a great horticultural authority of London, pronounces the American apple "the grandest fruit that ripens under the sun." And will he say, for the English apple is an insipid, tame affair, compared with the solid, aromatic, sun-colored and sun-steeped fruit of our northern orchards. In the humid, cloudy and foggy climate of England, the maple tree yields no sugar, and the apple tree no such sweet, delicious fruit as our Tolmans and Franklins. "The grandest fruit that ripens under the sun." That may sound extravagant—but is it not true? What single fruit is adapted to so universal use, and to such universal taste? It compasses, in its eatable, fresh condition, in all the markets of the temperate-zone world, eleven months certainly of the yearly round, and in extreme instances, the two ends of the year meet, with apples still upon the table. Like bread, one never tires of the apple. Of what other fruit of the tropics or the temperate climate can it be said that everybody likes it at all times of the year? Pears, plums, grapes, oranges, figs, dates—run through the entire list, and the apple will outlast them all. While the market is supplied with corks oranges, picked under-ripe, or with canned and preserved fruits from different climates, as insipid as they are costly, the northern-grown and northern-ripened apple, full to the bursting of the stored-up richness of the ripening autumn sun, takes its place on the fruit stands—a whole length ahead of them all, cheap in price, and appealing to the satisfaction of every taste. *—Prairie Farmer.*

**Keeping Apples.**  
A correspondent of the *Country Gentleman* says:  
"Apples should not be pulled off by main force; the stem may tear out and leave a wound in the flesh which will rot. There is a knack in picking neatly. The stem should be broken off by the end of the thumb thrust against and under the forefinger. Neither should they be handled roughly, nor poured down into a barrel.  
"The time for picking will be determined by the latitude, the season and the variety. The Rome Beauty should be picked a week before the Russet, and the Tulpehocken a week before the Rome Beauty. If the autumn has been dry and hot, apples should be gathered earlier than in a cool, moist season. An apple whose stem begins to cleave away from the wood has hung on the tree too long; it will drop soon, and even if plucked soon, it will not generally keep so well as if it had been gathered sooner.  
"It is a great mistake to put apples into barrels or boxes directly after they are picked. In the first place the fruit is yet hard, the skin being fully distended and brittle, the surface plump and smooth. In this condition the skin is easily ruptured, and the oxygen of the atmosphere entering the puncture, induces decay. The cells composing the skin are, during the process of

growth, constantly filled to their utmost capacity with a watery secretion; and in a very rainy season this accumulation of moisture sometimes bursts the skin, but less perhaps in the apple than in the peach, the plum and the orange. If the fruit hangs on the tree long enough, this condition of fullness and tension will gradually abate, the skin will become very slightly wilted, and a shrinkage of bulk will take place. But the apple should be picked before these symptoms of perfect ripeness appear; and the curing process of nature must be accomplished by art; in other words, by the sweat. The sweat is simply the discharge of the superfluous moisture of the skin; it is the same as the initiatory step of drying the fruit. Dried fruit will keep indefinitely; an apple with a properly dried skin will keep better than if the skin has not been allowed to dry.  
"For a month or more after picking, apples should be kept in a cool, dry place, not more than three or four degrees, to allow the sweat to escape. One year we had some very nice apples, and a neighbor engaged a number of barrels of the choicest russets. He insisted on having them placed in barrels at once, while we laid our own under the trees and covered them lightly with straw. When he came to remove them he was mortified, and not wholly without suspicion, when he found them already much rotted, while our own were sound.  
"Apples may be kept very plump and juicy in a pit, like potatoes, and taken out by installments through the winter to make cider. The pit should not be covered so deep with earth by four inches, as potatoes are; and a wisp of straw should be left in the top of the pit and covered with a board, to exclude rain and permit ventilation. But they should be well sweated before they are covered up for the winter.  
"The old time New England way was to have a series of shelves in the cellar, on which the apples could be sorted over. No apple was to be used until it was specked. I find a better way is to barrel them up tight when the sweat is fully over, set them in the cellar, open a barrel at a time, and use them all up before another one is opened. They keep better this way."

**The Introduction of the Le Conte Pear.**  
It is decidedly probable that more has been written within the past two years, concerning the introduction into this country, and the peculiarities of the Le Conte pear, than concerning any other fruit-tree in America; much has been written inaccurately, and attempts at correction have been equally unreliable. During the spring of 1881, the writer traveled as newspaper correspondent through the southeastern counties of Georgia, and finding the people enthusiastic concerning the alleged desirable qualities of the tree and its fruit, inquiry concerning its origin and character naturally followed, and these facts, furnished upon indisputable authority, were gathered:  
During President Polk's administration, a gentleman by the name of Le Conte was an attaché of the United States legation to Japan. Upon his return he brought two pear cuttings, one of which he gave to his sister, residing in Liberty County, Georgia, and now the wife of Judge Harding, of that county. The other was given to a friend residing elsewhere, and did not live. The first was planted near Dorchester, in the above county, and thrived. In the spring of 1881 it was forty years old, was a large and vigorous tree, and in full bearing. From this mother-tree have come all of the Le Conte pear trees in this country, taking this name from the gentleman who had introduced it. It is situated on the farm of the above-named Judge Harding, who has an extensive nursery and makes a specialty of these trees.  
**Horticultural Notes.**  
GRAPES weighing from five to ten pounds per bunch are so frequent in California that no mention is made of them. A bunch weighing 16 lbs. was, however, thought worthy exhibition.  
THE production of the Wilson strawberry, says Parker Earle, was the beginning of a new era in strawberry culture, just as the introduction of the Concord grape stimulated grape culture and gave rise to hundreds of other sorts.  
PARKER EARLE thinks there has been as yet no absolute over-production of good fruit, but the cause of low prices is defective distribution. When fruit, by cheap and rapid transportation, is brought within the reach of everybody, there will be none too much.  
THE Kent County Horticultural Society made a large and interesting exhibit of chrysanthemums at the last meeting. J. A. Hovey showed 24 distinct varieties; Wm. Dunn had a plant of the original pink variety brought from the Chinese Empire, and many others showed beautiful specimens of this popular autumnal flower.  
NEAR Wellington, Southern Kansas, is a hundred acre orchard, which is quite a novel sight to northern people. The trees are set one rod apart, and branched out from the ground, so that the fruit could be gathered by the aid of a low step-ladder. The Ben Davis is a favorite variety. The quality of the fruit is hardly as good as that of northern orchards.  
APPLES in a dried state are made use of in France for the manufacture of cider, and they are almost wholly of foreign product. This fact goes to show that the surplus of the American crop can be dried and find a foreign market. But for that market it may be borne in mind that pared apples are subject to a duty, while those unp pared are not so; if sliced and dried with the skin on and core in they are duty free.  
A WRITER in *Gardening Illustrated* says he has found sulphate of potassium an efficient remedy for mildew on the strawberry. Some were treated at the rate of a quarter of an ounce to the gallon, and others with double that strength. The mildew was killed in each case, and the fruit came off clean. No trace of injury was found to the foliage. With sulphur the foliage is burnt when a few hot days occur. This treatment is recommended for rose-growers.  
THE *Gardener's Monthly* says: "It is by no means demonstrated that a want of potash in the soil is a safeguard against yellows. There are plenty of instances where trees have the yellows in soil over-abounding in potash. It has been clearly demonstrated by Professor Penhallow, that there is a deficiency of potash in the wood of trees affected by yellows; but this may be from the diseased condition

of the tree, depriving the tree of its usual power to assimilate what it ought to do; or from properly using the vital power over the potash element, and not from any scarcity of potash in the soil itself.  
THE *Country Gentleman* says: "Amid many new and highly lauded varieties of the grape, we have not seen any which appear to promise better than the sort known as Empire State. (We should prefer a more appropriate name.) Its handsome clusters and excellent flavor, and its healthy growth are not always found in one sort. It is stated to be a cross of the Hartford and Clinton, and to be wholly a native sort; but George W. Campbell, who is high authority on grapes, thinks that its fine flavor is partly owing to a dash of the foreign element in its character."  
M. CHARLES GIRARD, chemist of Paris, recently amused himself by investigation of the ingredients of a beautiful red currant jelly, charmingly put up for export to the United States. There was not an atom of fruit in the mass, as was demonstrated by the adding to it of methylated alcohol, which would have turned it green had it contained any fruit acid. It was found to consist of gelatine, sweetened with glycerine residue, colored with picholine (a poisonous mineral extract) and flavored with no one knows what. A great many people in this country imagine no currant jelly so good as that which is imported from France.  
CATARRH CURED.  
A clergyman, after years of suffering from that loathsome disease, Catarrh, and vainly trying every known remedy, at last found a prescription which completely cured and saved him from death. Any sufferer from this dreadful disease sending a self addressed stamped envelope to Dr. Lawrence, 212 East 9th St., New York, will receive the recipe free of charge. *—14-cow-105*

**Apianian.**  
Rendering Comb into Wax.  
C. P. DADANT read a paper before the Indianapolis Convention on this subject, in which he said:  
The rendering of comb into beeswax can be effected by artificial heat, or by the sun's rays. The heating on stoves or by steam is the most usual way, but many inexperienced persons spoil their wax either by melting it without water, or by overboiling, or by using dirty iron kettles. When comb is melted over a stove, it is not absolutely necessary to have an apparatus expressly for the purpose. Any ordinary boiler will answer. A great deal of water should be used, and a moderate heat applied. When the wax is thoroughly melted it can be dipped off the top, by using a piece of wire-cloth shaped like a dipper, hung in the kettle to prevent the coarsest impurities from being dipped out. We have never seen any old combs, no matter how old, that did not make nice yellow wax when treated in this manner, or by the use of a wax-extractor. As a matter of course a good wax-extractor, if properly used, will give cleaner wax at the first melting.  
If steam is used to melt comb, it should not be turned directly on the comb, but into the water below it, the steam often damaging the wax, and making it grainy and green looking. This same unpleasant result is sometimes attained by over-boiling.  
If some wax remains in the dregs, it is not advisable to throw away these residues. We have never yet seen any process that separated them so completely that they could be called worthless. Wax-bleachers usually press the wax out of them in a small press while hot. But a cheaper way, on a small scale, is to preserve them, or rather the best of them in a box, exposed to the weather, until more comb has to be melted, when they can be melted again with it. The exposure to the weather dissolves the foreign substances, but not the wax, which, at all appearances, is indestructible.  
Cappings of honey are melted in the same manner as old combs. It is well, however, to work them, first, in warm water to separate the honey that is left. This sweetened water can be used to advantage in cider or wine-making, and for vinegar. Honey-vinegar is the very best that is made.  
We have many times heard it said that it did not pay to melt old combs, but this is a mistake. It is not advisable to melt them with nice new comb, but any apiarist who will try rational methods, can find a profit in melting the very oldest and dirtiest combs that can be found.  
The heat of the sun, in rendering comb, makes the finest beeswax, as it not only melts it, but partly bleaches it, and we have to thank our Italian brothers for the first idea of this, as well as for invention of the extractor. Thus far, however, little use has been made of this discovery, but the time is not far distant when the solar extractors will be as plentifully found as steam or stove extractors. This method will have the advantage of giving clean wax at the first melting, without any danger of spilling it.

JAMES HEDDON, of Dowagiac, has a crop of about 30,000 pounds of clover and basswood honey.  
A FIRM of apiarists, brothers, living at Dundee, Ill., have just sold their crop of honey, weighing 38,000 pounds, for \$5,000, cash down.  
BEESWAX sells for 20 to 25 cents per pound, but as every pound is made at the expense of about 20 pounds of honey, its production costs the bee-keeper much more than he receives for it.  
In reply to a question as to the expediency of keeping bees over winter in the centre of a strawstack, James Heddon thinks they would be well protected, if the straw was stacked to turn water. J. E. Pond agrees, if care is taken to prevent excess of moisture, which he believes a greater evil than cold.  
A CANADIAN bee-keeper has discovered a new use for basswood shavings. He was pondering the feeding problem when an idea occurred to him, which he tested as follows: "I filled everything that would hold honey and syrup, then crammed the vessels loosely full of shavings, heaping some on top, and I had daily feeders to put anywhere I wanted, either behind the loose division boards, or in empty upper stories, raising the quilt at one corner to let the bees pass up to the feeder. The rapidity with which these were emptied was something remarkable. Of course, in feeding from anything except wood, I was very careful to have at least one shavings hang over the edge of the vessel. In feeding I found that it made little difference whether honey or sugar syrup was used, though I prefer for fall feeding a mixture of half good honey and half very thick or granulated sugar syrup."  
A CORRESPONDENT of the *Agricultural Gazette* says: "Owing to the very changeable and snowy weather, with but little evaporation, hives not thoroughly protected or covered with woolen or other cloth material are likely to be dripping with wet. On the first opportunity remove cloths and substitute hay or dried grass instead. Also change or clean floor boards that are at all damp. These should be fitted with a perforated zinc floor, with a sliding shutter beneath to where all debris falls, thereby keeping the bees more comfortable, healthy, and saving them a great amount of labor. It is too early yet to speak of feeding; but careful watch should be kept over all stocks, so that none suffer from want. Owing to the nature of the past three months much meat has been consumed by the bees attempting, and many actually breeding, so that with honey consumed for secreting wax to cover brood cells, and that consumed by the young, those hives with insufficient food at the end of autumn are sure to suffer, which a timely feed will prevent. The bee-keeper alone must satisfy himself of the actual state of his hives, which, at this season he will have plenty of time to inspect, as well as making preparations for the summer's campaign."

**The Youth's Companion**  
WILL PUBLISHED  
In the volume for 1887 an article written for it by the Marquis of Lorne and specially ILLUSTRATED for the COMPANION by the Princess Louise,  
**The Princess Louise and Marquis of Lorne**  
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A. M. P. M. Leave Arrive A. M. P. M.  
7:00 6:30 Detroit 11:00  
7:42 7:15 St. Ignace 8:30 5:55  
7:42 7:15 Moran 8:01 5:00  
8:28 8:01 Paines 7:41 4:15  
8:28 8:01 Osark 7:34 4:00  
8:25 8:02 Newberry 6:21 3:05  
11:09 9:14 Marquette 6:00 1:15  
12:30 10:40 Sault Ste. Marie 5:15 12:00  
1:07 10:02 Washburn 4:49 11:40  
2:30 10:42 Reedsville 4:15 11:00  
2:30 11:00 Cornish 3:58 10:40  
3:25 11:31 Au Train 3:25 9:05  
3:48 11:38 Rock River 3:17 8:45  
4:05 11:50 Onota 3:06 8:35  
4:38 12:05 Sand River 2:50 7:00  
5:30 12:40 Marquette \$2.15 17:00  
A. M. 17 P. M. Live Arr. P. M. A. M.  
1:00 12:40 Marquette 2:00 00:00  
1:40 1:00 Negaunee 1:35 00:00  
1:55 1:35 Ishpeming 1:38 00:00  
3:05 3:00 Republic 1:10 00:00  
3:05 3:00 Calumet 1:10 00:00  
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MICHIGAN FARMER  
DETROIT, TUESDAY, NOVEMBER 30, 1885.

This Paper is Entered at the Detroit Post-  
office as second class matter.

WHEAT.

The receipts of wheat in this market  
the past week amounted to 178,805 bu., against  
268,898 bu., the previous week and 132,349  
bu. for corresponding week in 1885. Shipments  
for the week were 145,133 bu. against  
315,549 bu. the previous week, and 161,639 bu.  
the corresponding week in 1885. The stocks  
of wheat now held in this city amount to 1,174,578 bu., against 1,639,354 bu. last week  
and 1,718,731 bu. at the corresponding date  
in 1885. The visible supply of this grain on  
Nov. 30 was 59,551,351 bu. against 58,322,548  
the previous week, and 54,535,543 bu. at  
corresponding date in 1885. This shows an  
increase from the amount reported the  
previous week of 1,235,803 bu. The export  
clearances for Europe for the week ending  
Nov. 30 were 1,412,218 bu. against 1,211,303  
the previous week, and for the last eight  
weeks they were 8,036,463 bu. against 8,274,511  
for the corresponding eight weeks in 1885.

Wheat showed alternate spells of weak-  
ness and strength the past week, with a  
quiet market the rule. Sales in this market  
for the week of spot and futures aggregated  
1,498,800 bu., against 1,435,000 the previous  
week. At the close on Saturday the mar-  
ket showed more strength than for some  
days, and the range of prices about the same  
as on the previous Monday. Yesterday the  
market here opened strong and higher,  
weakened a little, and finally closed strong  
at a sharp advance. Chicago was also high-  
er and active. New York was quoted high-  
er, with a good export demand. Last re-  
ports from all points were the strongest of  
the day. Liverpool was firm, with holders  
offering their stocks only moderately. The  
visible supply only increased 20,000 bu. the  
past week. Over half a million bu. were de-  
stroyed by fire on Saturday last at Duluth.

The following table exhibits the daily closing  
prices of spot wheat from November 1st  
to November 29th inclusive:

Nov. 1	No. 1 White.	No. 2 Red.	No. 3 Red.
1	76 1/2	75 1/2	74 1/2
2	76 1/2	75 1/2	74 1/2
3	76 1/2	75 1/2	74 1/2
4	76 1/2	75 1/2	74 1/2
5	76 1/2	75 1/2	74 1/2
6	76 1/2	75 1/2	74 1/2
7	76 1/2	75 1/2	74 1/2
8	76 1/2	75 1/2	74 1/2
9	76 1/2	75 1/2	74 1/2
10	76 1/2	75 1/2	74 1/2
11	76 1/2	75 1/2	74 1/2
12	76 1/2	75 1/2	74 1/2
13	76 1/2	75 1/2	74 1/2
14	76 1/2	75 1/2	74 1/2
15	76 1/2	75 1/2	74 1/2
16	76 1/2	75 1/2	74 1/2
17	76 1/2	75 1/2	74 1/2
18	76 1/2	75 1/2	74 1/2
19	76 1/2	75 1/2	74 1/2
20	76 1/2	75 1/2	74 1/2
21	76 1/2	75 1/2	74 1/2
22	76 1/2	75 1/2	74 1/2
23	76 1/2	75 1/2	74 1/2
24	76 1/2	75 1/2	74 1/2
25	76 1/2	75 1/2	74 1/2
26	76 1/2	75 1/2	74 1/2
27	76 1/2	75 1/2	74 1/2
28	76 1/2	75 1/2	74 1/2
29	76 1/2	75 1/2	74 1/2

The following tables give the closing prices  
each day of the past week on the various  
deals of No. 1 white:

	Dec.	Jan.	Feb.
Tuesday	76 1/2	75 1/2	74 1/2
Wednesday	76 1/2	75 1/2	74 1/2
Thursday	76 1/2	75 1/2	74 1/2
Friday	76 1/2	75 1/2	74 1/2
Saturday	76 1/2	75 1/2	74 1/2
Sunday	76 1/2	75 1/2	74 1/2

For No. 2 red the closing prices on the  
various deals each day of the past week were  
as follows:

	Dec.	Jan.	Feb.
Tuesday	75 1/2	74 1/2	73 1/2
Wednesday	75 1/2	74 1/2	73 1/2
Thursday	75 1/2	74 1/2	73 1/2
Friday	75 1/2	74 1/2	73 1/2
Saturday	75 1/2	74 1/2	73 1/2
Sunday	75 1/2	74 1/2	73 1/2

The visible supply is now the largest ever  
known, the nearest approach to the amount  
being on December 27, 1885, when it was  
58,761,953 bushels. This large amount is a  
grand argument for the "bears," who point  
to it as an indisputable evidence that there is  
more wheat in the country than will be  
wanted, and that lower prices are likely to  
obtain. But the fact is farmers have  
sold earlier than usual, and with improved  
transportation and elevator facilities, the  
crop has been moved out more rapidly. It  
is simply "in sight," instead of in the farm-  
ers' barns, and when once the amount be-  
gins to go down it will become apparent  
that the reserves behind stocks in sight  
are much lighter than usual.

The news from Great Britain and the con-  
tinent of Europe is of interest. From Rus-  
sia reports show that the light grain crop of  
1885 has been succeeded by one equally as  
light this season. The exports from St.  
Petersburg have ceased for the season, and  
reports from Odessa say that prices there  
are above an export basis. Dealers report a  
great falling off in receipts.

Mail advices from France say that the re-  
port of the commission appointed to con-  
sider the question of increasing the import  
duty on foreign grain was presented to the  
French Chamber of Deputies on the 10 inst.  
The report recommends that the duty on  
wheat and other grain be raised to 5 francs  
per 100 kilograms, and that on flour to 8  
francs per 100 kilos—cargoes shipped prior  
to Oct. 31, direct to a French port, to pay  
the old duty of 3 fr. per 100 kilos on wheat.  
The general opinion is that the matter will  
not be taken up for discussion until the Janu-  
ary session. In the meantime large stocks  
are being laid in by dealers so as to be ready  
for the increased duties, which most of them  
believe will likely be adopted early in the  
new year.

The receipts of home and foreign grain

wheat in the English markets during the  
week ending Nov. 13 were 50,000 to 200,000  
bu. less than the estimated consumption;  
and for the eight weeks ending Nov. 6 the  
receipts are estimated to have been 433,608  
bu. less than the consumption.

The following statement gives the amount  
of wheat "in sight" at the dates named, in  
the United States, Canada, and on passage  
for Great Britain and the Continent of Eu-  
rope:

Visible supply.	Bushels.
On passage for United Kingdom.	15,328,000
On passage for Continent of Europe.	5,400,000
Total bushels Nov. 13, 1885.	70,656,548
Total previous week.	72,368,479
Total two weeks ago.	70,231,901
Total Nov. 14, 1885.	61,763,019

The Liverpool market is quoted higher  
with good demand. Winter wheat is quoted  
at 6s. 11d/7s. 1d; spring at 6s. 9d/6s. 11d,  
and California No. 1 at 7s. 0d. to 7s. 3d.  
per cental.

CORN AND OATS.

CORN.

The receipts of corn in this market the  
past week were 50,074 bu., against 61,037  
bu. the previous week, and 55,337 bu. for the  
corresponding week in 1885. Shipments for  
the week were 74,565 bu., against 43,236 bu.  
the previous week, and 33,751 bu. for the  
corresponding week in 1885. The visible  
supply of corn in the country on Nov. 20  
amounted to 13,389,408 bu. against 13,096,713  
bu. the previous week, and 14,140,303 bu. at  
the same date last year. The visible supply  
shows a decrease during the week indicated  
of 807,305 bu. The exports for Europe the  
past week were 614,397 bu., against 456,177  
bu. the previous week, and for the past eight  
weeks 4,994,910 bu., against 6,134,669 bu.  
for the corresponding period in 1885. The  
stocks now held in this city amount to 25,233  
bu. against 21,544 bu. last week and 46,635  
bu. at the corresponding date in 1885. There  
has been more activity in corn the past  
week, and under the improved demand  
sellers have been able to secure an advance  
in values. No. 2 is selling here at 38 1/2c,  
No. 3 at 38 1/4c, and No. 2 white at 38 3/4c per  
bu. There is not much doing in a specula-  
tive way in this market. At Chicago there  
has also been an advance during the week in  
both spot and futures. No. 2 spot corn is  
quoted there at 36 1/2c, November delivery at  
37c, December at 37c, January at 37 1/2c, and  
May at 42 1/2c per bu. Toledo is steady and  
firm at 38c per bu. for No. 2 spot, and 43c  
for May delivery. New York is reported  
firm and higher. The Liverpool market is  
quoted firm with fair demand. Quotations  
there yesterday were as follows: new mixed  
spot, 4s. 4 1/2d. per cental; November deliv-  
ery, 4s. 4 1/2d.; December, 4s. 4 1/2d.; Janu-  
ary, 4s. 4 1/2d.

OATS.

The visible supply of this grain on Nov. 30  
was 5,650,746 bu., against 5,619,600 bu. the  
previous week, and 2,966,216 bu. Nov. 21,  
1885. The exports for Europe the past  
week were 31,557 bu. against 59,233 bu.  
the previous week, and for the last eight  
weeks were 243,459 bu. against 1,939,476  
bu. for the corresponding weeks in 1885. The  
visible supply shows an increase of  
1,146 bu. during the week. Stocks held in  
store here amount to 21,263 bu., against  
21,469 bu. the previous week, and 9,520  
bu. at the corresponding date in 1885. The  
receipts at this point for the week were 25,776  
bu., against 40,881 bu. the previous  
week, and 18,221 bu. for the corresponding  
week last year. The shipments for the week  
were 18,935 bu., against 7,944 bu. the pre-  
vious week, and 3,994 bu. for same week in  
1885. Oats are again higher, with white  
showing the greatest advance. No. 2 white  
are quoted at 32 1/2c/33 1/2c per bu. No. 2  
mixed at 28 1/2c, and light mixed nominal at  
31c. The market is quite firm at the ad-  
vance. At Chicago the market is also firm,  
with prices higher than a week ago. Quo-  
tations there are 26 1/2c for No. 3 mixed  
spot, 26 1/2c for November delivery, 26 1/2c  
for December, 26 1/2c for January, and 30 1/2c  
for May. Sample lots are selling there at  
30 1/2c for No. 2 white, 29 1/2c for No. 3  
white, and 27 1/2c for No. 3 mixed. At  
New York the market is quoted active and  
higher; No. 2 white are quoted there at 36c  
per bu., No. 3 white at 35 1/2c, and No. 3  
mixed at 33 1/2c. Mixed western are quoted  
at 33 1/2c, and white western at 35 1/4c.

BARLEY.

During the past week barley was received  
in this market to the amount of 33,583 bu.,  
as compared with 33,514 bu. for the cor-  
responding week last year. The visible sup-  
ply of this grain on November 30 was 2,666,673  
bu., against 2,597,418 bu. the previous  
week, and 3,039,045 bu. at the correspond-  
ing week in 1885. The past week has seen  
more activity in the barley market than for  
some months, and under the improved de-  
mand values began to move upwards. State  
No. 2 sold up to \$1 30 per cental, and  
Western No. 2 at \$1 28. At Chicago the  
market is quiet in consequence of light re-  
ceipts, with sales by sample at 58 1/2c  
per bu. for No. 3, and western, 49 1/2c  
per bu. for No. 3, and 41c for No. 4. At  
New York Canada is quoted steady, with  
No. 1 held at 76c per bu., No. 2 at 71 1/2c,  
and No. 1 bright at 80c. Two-rowed State  
is selling at 63 1/2c, and six-rowed at 62 1/2c  
per bu. At Milwaukee the market is  
steadier, with No. 2 western quoted at 53c  
per bu. Five Detroit breweries have been  
"boycotted" the past week, and this may  
cut down the demand from the home trade,  
but what is their loss will be some one else's  
gain, as the average working man seems to  
prefer hunger to thirst, and must have his  
beer. If they would only "boycott" all  
beer and all saloons they would avoid the  
heaviest tax paid by them to support the Gov-  
ernment, and be better off in health and  
pocket.

COVET SEED is not doing so well as a  
week ago, and with a lessened demand  
prices fell off quite materially. Prime is  
now quoted at \$4 40 per bu. and No. 2 at  
\$4 10. For January delivery, prime is  
quoted at \$4 40 per bu. for Toledo spot. At  
Chicago prime is quoted at \$4 40 per bu.,  
and fine at \$4 50. It is yet early in the sea-  
son, and too soon to predict with any degree  
of accuracy what the future of the market  
will be. It should go higher.

A resident of New Haven is shipping pot-  
atoes to Texas, where they are worth four  
cents per pound.

DAIRY PRODUCTS.

BUTTER.

The market does not show any improve-  
ment, and in fact, while quotations are un-  
changed there is not so good an inquiry as  
ten days ago. Extra dairy selections sell at  
18 1/2c, good to choice at 15 1/2c, and the low-  
est grades at 7 1/2c/12c per lb. Creamery is  
steadily but quiet at 26 1/2c per lb., with a  
light demand. At the moment the market  
here is the weakest of any of the more im-  
portant ones, either east or west. At Chi-  
cago a free movement is noted for all grades,  
and choice lots are picked up almost as fast  
as they come in. There are no accumula-  
tions and prices rule firm. Fancy selections  
of creamery are quoted at 26 1/2c per lb.  
Fine to choice Iowa, Wisconsin, and similar  
makes range from 24 1/2c. Held lots are  
quotable at 18 1/2c, while summer-made  
goods are neglected at 13 1/2c. Fancy  
dairies are in special request for consump-  
tion at 22 1/2c, and fresh, sweet stocks are  
quoted at 16 1/2c. Low grades and pack-  
ers' stock sell freely at 8 1/2c. The New  
York market is a little higher than a week  
ago on some grades of fancy stock, but as a  
rule that market shows little change. The  
N. Y. Daily Bulletin of Saturday says of  
the market:

"Buyers when they came upon the mar-  
ket did not appear to be difficult to manage  
and some very fair sales have been accom-  
plished, yet there was an absence of spirit  
that seemed to be discouraging to some  
operators and more or less complaint was to  
be heard. In the matter of cost the changes  
have been slight and most prominent on the  
upper line of quality, local buyers appearing  
to have either accumulated enough for the  
present or operating more closely to current  
requirements. Second and third priced  
goods, however, have been very well sold, and  
out of town and remained quite steady, with  
some dealers making a fair reduction in their  
accumulations. Indeed, aside from the slow  
character of trade, which after all may prove a  
healthy feature, as a preventive of distorted  
values, but is by no means in a bad posi-  
tion, and conservative operators predict that  
the market will eventually 'work around all  
right.'"

Quotations in that market yesterday were  
as follows:

EASTERN STOCK.	
Creamery tubs, fancy.	28 1/2
Creamery tubs, choice.	28 1/2
Creamery tubs, prime.	28 1/2
Creamery tubs, good.	28 1/2
Creamery tubs, fair.	28 1/2
Creamery tubs, inferior.	28 1/2
Creamery tubs, very inferior.	28 1/2
Creamery tubs, no. 1.	28 1/2
Creamery tubs, no. 2.	28 1/2
Creamery tubs, no. 3.	28 1/2
Creamery tubs, no. 4.	28 1/2
Creamery tubs, no. 5.	28 1/2
Creamery tubs, no. 6.	28 1/2
Creamery tubs, no. 7.	28 1/2
Creamery tubs, no. 8.	28 1/2
Creamery tubs, no. 9.	28 1/2
Creamery tubs, no. 10.	28 1/2
Creamery tubs, no. 11.	28 1/2
Creamery tubs, no. 12.	28 1/2
Creamery tubs, no. 13.	28 1/2
Creamery tubs, no. 14.	28 1/2
Creamery tubs, no. 15.	28 1/2
Creamery tubs, no. 16.	28 1/2
Creamery tubs, no. 17.	28 1/2
Creamery tubs, no. 18.	28 1/2
Creamery tubs, no. 19.	28 1/2
Creamery tubs, no. 20.	28 1/2

WESTERN STOCK.

Western creamery, Elgin.	29 1/2
Western creamery, choice.	29 1/2
Western creamery, prime.	29 1/2
Western creamery, good.	29 1/2
Western creamery, fair.	29 1/2
Western creamery, inferior.	29 1/2
Western creamery, very inferior.	29 1/2
Western creamery, no. 1.	29 1/2
Western creamery, no. 2.	29 1/2
Western creamery, no. 3.	29 1/2
Western creamery, no. 4.	29 1/2
Western creamery, no. 5.	29 1/2
Western creamery, no. 6.	29 1/2
Western creamery, no. 7.	29 1/2
Western creamery, no. 8.	29 1/2
Western creamery, no. 9.	29 1/2
Western creamery, no. 10.	29 1/2
Western creamery, no. 11.	29 1/2
Western creamery, no. 12.	29 1/2
Western creamery, no. 13.	29 1/2
Western creamery, no. 14.	29 1/2
Western creamery, no. 15.	29 1/2
Western creamery, no. 16.	29 1/2
Western creamery, no. 17.	29 1/2
Western creamery, no. 18.	29 1/2
Western creamery, no. 19.	29 1/2
Western creamery, no. 20.	29 1/2

The exports of butter from American  
ports for the week ending November 20 were  
269,436 lbs., against 283,971 lbs. the pre-  
vious week, and 438,749 lbs. two weeks  
previous. The exports for the correspond-  
ing week in 1885 were 239,349 lbs.

CHEESE.

Cheese maintains its position with much  
firmness, and under reports of a fair demand  
for shipment and steady markets abroad at  
the recent advance, certainly the outlook is  
very favorable for holders. In this market  
there is no change to note in quotations,  
which are as follows: Full cream Michigan,  
12 1/2c/13c; New York, 12 1/2c/13c; Ohio,  
11 1/2c/12c. The Chicago market is reported  
firm with a good demand and at slightly  
higher prices. Quotations there are as fol-  
lows: Full cream cheddars, 12 1/2c/13c; full  
cream flats (two in a box), 12 1/2c/13c;  
Young Americans, 12 1/2c/13c; low grades, 3c/  
5c. At New York the tendency is toward  
an advance in values, and if values are  
maintained abroad, there will probably be a  
marking up of prices within a day or two.  
Of the outlook the N. Y. Daily Bulletin of  
Saturday says:

"It is somewhat difficult to determine  
whether quotations should be marked up a  
fraction or not on the fancy goods. As a  
rule, however, they cannot obtain more  
than 12 1/2c for their offering, and reports sales  
at that rate, but a few have done business at  
3 1/2c more, both with the foreign and domestic  
trade, one pretty long line to the latter,  
and buyers with orders for a close, careful  
selection admit that they cannot get 'just  
what they want' for less than 12 1/2c. While,  
therefore, the latter is not a general or  
single quotation it looks as though it  
should be recognized as a possibility on the  
perfect goods, with white butter certainly  
as much as colored. In other words, there  
has been fair trading at 12 1/2c/13c, and  
12 1/2c, the latter now and then on lots con-  
taining a few September dates, and the bulk  
of the Central New York cheese sold in the  
country on Monday so far as received has  
been above the latter range. Skims about  
before in price and meeting with fair de-  
mand."

Quotations in that market yesterday were  
as follows:

State factory, fancy.	12 1/2
State factory, choice.	12 1/2
State factory, prime.	12 1/2
State factory, good.	12 1/2
State factory, fair.	12 1/2
State factory, inferior.	12 1/2
State factory, very inferior.	12 1/2
State factory, no. 1.	12 1/2
State factory, no. 2.	12 1/2
State factory, no. 3.	12 1/2
State factory, no. 4.	12 1/2
State factory, no. 5.	12 1/2
State factory, no. 6.	12 1/2
State factory, no. 7.	12 1/2
State factory, no. 8.	12 1/2
State factory, no. 9.	12 1/2
State factory, no. 10.	12 1/2
State factory, no. 11.	12 1/2
State factory, no. 12.	12 1/2
State factory, no. 13.	12 1/2
State factory, no. 14.	12 1/2
State factory, no. 15.	12 1/2
State factory, no. 16.	12 1/2
State factory, no. 17.	12 1/2
State factory, no. 18.	12 1/2
State factory, no. 19.	12 1/2
State factory, no. 20.	12 1/2

A Montreal commission house, under  
date of 24th inst., says:

"Stock in Montreal is from 75,000  
to 80,000 boxes, which include all  
goods east of Toronto except about  
10,000 boxes in local storage at one  
or two country points. Toronto West  
has 10,000 to 12,000 boxes, bought and  
unbought. Today information from the  
West reports the balance of unsold goods,  
which are colored, being taken up at 12 1/2c/  
13c, and in a few days the entire stock of  
Canada will be held for English account.  
All cheese held here and east of Toronto is  
for foreign account, and we do not think  
over 3,000 boxes in Montreal are for sale on  
the market."

The receipts of cheese in the New York  
market the past week were 43,172 boxes  
against 45,143 boxes the previous week  
and 40,706 boxes the corresponding week  
in 1885. The exports from all American  
ports for the week ending Nov. 20 foot up  
2,272,218 lbs., against 3,242,563 lbs. the  
previous week, and 2,438,268 lbs. two weeks  
ago. The exports for the corresponding  
week last year were 2,139,657 lbs. Of the  
exports, 1,399,180 lbs. were from Montreal.  
The Liverpool market is quoted steady

with quotations on American cheese at 62s.  
per cwt., the same figure quoted one week  
ago.

WOOL.

The eastern markets are in much the  
same shape as a week ago, with perhaps a  
stronger feeling upon some lines of stock,  
such as No. 1 and delaine wools, which are  
scarce. The past week has been rather  
quiet, owing to Thanksgiving Day breaking  
up business to some extent, and the record  
of sales shows a falling off from that cause.  
At Boston sales for the week aggregated  
1,750,500 lbs. of domestic and 104,000 lbs.  
of foreign, as compared with 2,152,900 lbs.  
of domestic and 250,000 lbs. of foreign the  
previous week, and 3,197,100 lbs. of domestic  
and 245,000 lbs. of foreign for the cor-  
responding week in 1885.

Quotations in that market are unchanged.  
Among the sales of washed fleeces we note  
XX and above Ohio at 38c, XX Ohio at  
37c, No. 1 Ohio at 40c, X Ohio at 34 1/2c,  
X Michigan at 32 1/2c/33c, Michigan delaine  
at 35 1/2c, and fine delaine at 36 1/2c. In  
combining wools Ohio No. 1 sold at 42c and  
Wisconsin No. 1 combining at 39c. Michi-  
gan No. 1 is scarce and in demand. A large  
number of the sales are reported on private  
terms. In foreign wools Australian is quiet  
and steady at 34 1/2c for clothing, 36 1/2c for com-  
bing, and 38 1/2c for cross-bred. The Boston  
Commercial Bulletin says of prospects and prices:

"Ohio and Pennsylvania fleeces are in  
very light supply and exceedingly strong.  
More than other grades are washed fine  
fleeces affected by the market on Australian  
wool and the improving prospect has lent a  
better tone to domestic wool. Ohio No. 1  
fleeces are slightly advanced, and X Michi-  
gan X is offered at 33c and could be  
sold in large lots at 32c. The few sales  
effected are usually between these figures.  
It is much to be doubted if any choice X  
could be purchased at less than 53c. Michi-  
gan No. 1 is very firm at 38c and very scarce.  
Combining and delaine fleeces have not  
altered materially. The best Ohio No. 1  
combining still sells at 42c ranging downward  
to 40c for more ordinary lots. Ohio delaine  
is in light supply. For choice lots of fine  
delaine 58c has been offered and refused  
during the week, but fair wool finds a  
purchaser only at a lower figure."

"Texas wool is quiet and steady. In-  
diana and Kentucky unwashed wool is in  
very light stock in this market. Combining  
and clothing are so generally sold together  
that it is impossible to quote them sepa-  
rately with any exactness, the wool selling on  
its condition rather than length of staple.  
Indiana 3/4-blood wool is somewhat softer  
than Kentucky and commands 31 1/2c. Ken-  
tucky 3/4-blood is quoted at 30 1/2c and  
Indiana and Kentucky 3/4-blood wools range  
upwards from 29c."

"Georgia wool is in merely nominal stock  
in this market. The small lots







## Poetry.

### LOVE HIDING.

Love was playing hide and seek,  
And we were on my wretched cheek  
For the setting of our sun;  
Dark it was around, above,  
But he came again, my love!

Chill and drear in wain November,  
We recall the happy spring,  
While, bewildered, we remember  
When the woods began to sing;  
All alive with leaf and wing,  
Leafless lay the silent grove;  
But he came again, my love!

And our melancholy frost  
Woke to radiance in his rays,  
Who wore the look of one we lost,  
In the far-away dim days;  
No prayer, we sighed, the dead may move,  
Yet he came again, my love!

Love went to sleep, but not forever,  
And we deemed that he was dead;  
Nay, shall aught avail to sever  
Hearts who once loved and were wed?  
Garlands for his grave we wove,  
But he came again, my love!

—Frank Leslie's Popular Monthly.

### WOMAN'S TEARS.

The fountain of a woman's tears  
Lies closer to her heart than man's.  
She lives by moments, he by years;  
She pities where he looks askance.

First she to act the Christian part,  
Keener to feel grief and pain;  
Perchance it is because her heart  
Is less a stranger to her brain.

Howbeit—'tis womanly to weep,  
And her sweet, sudden tears of shame  
Our better selves from torpid sleep  
To win a purer, nobler name.

Dear, tender, dreamy woman eyes!  
How oft your tender, pitying tears  
Have lifted us from garment-wise,  
The pent-up bitterness of years.

How oft your tears in some dark day,  
Down dropping, sweet as scented thyme,  
On our rough hearts, have kissed away  
The stain of some intended crime.

—Brooklyn Magazine.

## Miscellaneous.

### ONE JULY AFTERNOON.

#### A Story for Farmers.

"I'm going to town, Mary," said Mr. Harris, as he rose from the dinner table and showed his chair noisily across the room. "If you've got anything to send, get it ready, quick."

"There's butter and eggs," answered his wife. "But I was thinking—"

"Well, get it ready, then. I wouldn't go, but Bob's broke the rake, and it's got to be fixed; and we have the rest of that hay to put in before night; and it looks like rain, too. I'll be around in five minutes and I don't want to have to wait. Put the eggs in bran, as I'm going fast, and fix the butter up right away." And he turned and walked off, and she carried it out, and used all her strength to lift it to his reach as he sat there. He turned to speak as he started off.

"I wish I could have gone!" sighed Mrs. Harris, loud enough for her husband to hear. He frowned dismally.

"Oh, yes, that's the way! What on earth do you want to go to town for? I'll take you till sundown to get ready, and the baby'll squall all the time. Can't I get everything?"

"Oh, yes, I suppose so. I know I can't go; I've enough to do here, but I thought, perhaps—"

She paused, and her husband, as if waiting for the pause, turned and walked quickly away. Mrs. Harris' thoughts were busy enough as she hastened to the cellar.

"Oh, dear!" she sighed, "I do want a calico dress out of this butter money, and it will be 20c. a pound much longer. I'm afraid Will won't get it if I ask him, but it seems as if I could wear this no longer; it's so warm."

And she looked down at the faded brown worsted that had been worn all winter and until now—July—nearly all the time. It was a very warm-looking dress, and on this afternoon her flaming cheeks and moist features did not need much to assert how uncomfortable she was, for the day was very warm. She was interrupted by an emphatic, "Whoa, now," from without before the butter was quite ready. The baby above, awakened by his father's loud voice, set up a loud scream, and the same voice came down to the nervous woman in impatient accents.

"Mary Jane! It does seem as if women are getting awful slow. I could have done three times what you have in this time," he added, as she came up from the cellar with a heavy three-gallon jar in her arms. He sat in the spring wagon composedly as she placed the butter in, and watched her go back for and fetch the large basket of eggs.

"Now what do you need?" he asked, gathering up the lines.

She told him quietly, and then nervously glancing into his face, she added:

"I guess there'll be enough left for some calico."

He looked amazed.

"Calico! Did I ever! What's that for?"

"Me a dress."

Did her face look fearful? It was unnoticed.

"A dress! Why, you don't need a dress; you've got a dozen. What all's that one? You'll last a year yet."

"It is so warm, Will, it nearly makes me sick to wear it. I will have a calico—just a cheap one; ten yards will do—I could put this away for winter again."

"O nonsense! Where's all that gingham you got?"

She glanced at his own garments.

half the afternoon. Get up, Charlie!" And he was soon out of sight in a cloud of dust. Mrs. Harris felt like sitting down on the shady door-step as she turned to go in, but she knew she could not. The baby had tired itself out crying, and was lying sobbing in the cradle. The dinner table was just as they left it, and that must be done before supper. She gave a glance toward the green trees and white tombstones of the graveyard close by, and suppressed quickly the bitter sigh that arose at the thoughts of the three little graves over there which held her sacred dust. She had long ago seen it was better thus. She sat down to soothe the sobbing baby, and under his mother's gentle touch he soon gave signs of a more comfortable state. She was very tired; she had done a hard day's work already, and was not half done.

Mr. Harris had a quantity of hay down, and kept himself and the boy and two hired men busy. Of themselves, there was only the father, mother and two children, the oldest and the youngest of the five. Twelve years it was since she had married good-natured, hard-working, ambitious Will Harris, whom every one said would "make money;" and they said, also, that he had done unusually well in securing Mollie Sanders for his wife. How golden the coming years looked to them! Mollie was graceful, lively and the prettiest girl in the country, and everybody knew she had taken the premium for her butter, and was far-famed for her bread-making. But it was "Mollie" then, never "Mary," and very few ever knew her name was Mary Jane. It was only in the last few years since she had been less sprightly and quick of foot, that he had called her Mary Jane. She did not get around as she used to, while he improved in appearance and capability every year. She did not reason why it was, but she felt the cause. "A continual dropping will wear away a stone."

She was aroused from her reverie by the striking of the clock. She laid the baby, in a fitful, feverish slumber, in his cradle, and hastened to the work. When she had the dishes washed and her hair combed, how much better she should feel, she thought; but she must feed the two hundred young chickens, ducks and turkeys before then, so that it was after three when at last the dishes were washed and in their places. Rob had come up for a jug of water for the men. He was only eleven, but he could work; his father had seen to that. The sun was so hot he wondered how the men could stand beneath the scorching heat, and then the familiar sound of horses' hoofs warned her husband had returned. She stood still by the door till she heard his voice speaking to the horses, and then in a louder tone:

"Come out and get these things."

She went out with her finger on her lips, trembling lest his voice had awakened the baby.

"Sun's awful hot," was his comment, as he piled her arms full of packages. "Wish you'd bring the swill pail as you come back. Those hogs haven't had a blessed mouthful to drink, I'll be bound, since morning."

She could have said that she had watered them a time or two herself, but she said nothing. The large tobacco pail was nearly full of swill, but she carried it out, and used all her strength to lift it to his reach as he sat there. He turned to speak as he started off.

"I saw Johnson, and he wanted butter, so I let him have it on the account there. There wasn't any left to get that calico, but I got it myself, so try and not get anything more till you have marketing enough to get it, for I can't buy so much out of hand."

She watched him drive away, holding the pail carefully poised over the wagon bed; but the next instant she was in the house. There was cooking to do for supper, and berries to pick, and if the baby would only sleep! She unrolled the calico. It needed only a glance to tell her there was not enough, and she soon saw the amount was seven yards. She couldn't have her calico dress after all, and her butter must go on a bill for blacksmithing, and she must take a sur from the one who should have given her better, because it had gone so deep in pocket, that forty-two cents which "he had paid himself" for the calico. There had been over three dollars' worth of butter!

She sighed and took up her burdens again. The baking was done when the baby waked, and she thought he seemed better. She sat him up in his high chair by the window. The sky was cloudy now; the men were hurrying back and forth in the hay field, and Rob was riding the rake. She picked her berries and had supper on the table as the men came in at six o'clock and the first big drops of rain descended.

"How did your calico suit?" asked Mr. Harris, as she handed him his coffee.

She looked him in the face.

"There's only seven yards," she said.

"Well?"

"Well, did you think seven yards would make a dress for as big a woman as I am?"

The hired men laughed.

"I could not put mother in my pocket," said Rob.

Mr. Harris looked at his wife. She was very poor and slender, weighing perhaps a hundred pounds. Her fingers were scarcely larger than the baby's, and he saw they were not as large as Rob's. Yes, she had taken his lot to be hers. She had red cheeks and bright blue eyes then. Her cheeks were scarlet with fatigue and heat, now, but not round and soft as they were then, and her eyes had a weary look in them. "Can't be my fault," ran through her husband's mind.

She certainly looked badly, but it did not seem to him that she could mind so much as that the hurry, quick words and impatience that were his habits. He took the milk pails and went to the cow barn, as usual, after supper. He was destined to have his ears opened. The men had preceded him to the barn to care for their teams. The rain had nearly ceased, and he was finishing the milking when he caught the sound of his own name.

"I tell you, I pity her," Joe Ames was saying. "What with her being everlasting on her feet, her sick baby, and Will's own fault finding, it's a wonder she's alive."

"Pshaw!" answered coarse John Mills. "That's the way of women; give 'em an inch and they'll take miles. The only way they're any good is to give 'em lots to do and keep them at it. And as for that young'un, if she warn't allers pettin' of it, it wouldn't be so tarmal cross."

"I know better," was the retort. "Mother

remembers when Will and his wife were married, and there never was a smarter, likelier girl anywhere. And Will was good, too, but he's got in such a way to make money, and the more she works the more she has to. Then they've buried three children, and mother says her hard work helped to shorten their lives, and—"

"Oh, you're a perfect baby yourself, that's my notion," sneered John.

"And I tell you," proceeded honest Joe, "if the poor thing goes on this way much longer, there'll be another grave over there for her's next to sick now, and I wish Will could see it."

He began to see it. He sat on the milk stool listening. He thought of long ago and now, the changes noticed at supper. He remembered how often she had received, as reward for her toil, short words from him. Not that he meant them so, but he was in haste always, and she surely was very slow; but then, as Joe was saying, she was sick—and the words, "another grave over there," seemed to ring in his ears. His lips closed spasmodically as he caught the last words of the conversation, as they closed the barn doors for the night.

"Well, then, why don't he get her some help? He has himself and Rob and us, and she—didn't you see her to-day toting the things back and forth while he looked on from the seat in the wagon! Made me mad. Wait till I get married!" And they passed out of hearing with these words.

Mrs. Harris came up to the door as usual to get the milk. Her husband watched her closely as she said:

"I can carry them in for you."

The look of wonder she flashed in his face made his heart beat rapidly. He watched her arrange the milk, giving a lift to the heavy pails and jars, occasionally. Picking up the empty pails, she, turning toward the kitchen, glanced at him. How tired she looked! He took the pails away from her and closed the milk house door. He placed both hands on her shoulders.

"Mollie," he said, in a husky voice, "tell me; have I been abusing you?"

She looked surprised, and he went on hurriedly:

"I heard to-night I was a brute; that you were worked to death, and got no sympathy except from strangers. They think you've changed since you married me, and I guess—I guess (he paused and drew her close in his arms) that it is all so, Mollie; but believe me, dear, that in my haste to make money I forgot you could not stand this, and that it was not that I no longer have your happiness in view. Do you believe me?"

Then he suddenly left her alone, for it is a hard thing for a proud man to come to confession. She sank on the floor and suffered hot tears to flow. Tired, sick, heart-weary, she felt a moment since as if she should drop with fatigue. She arose, soon, and having washed the pails, took the baby from Rob and sat down in the sitting-room where they all sat. The rain had cooled the air off, and as she rocked to and fro with the child asleep in her arms, she looked up to find her husband's eyes on her. She smiled.

"Mollie," said he, "would twenty-five yards of calico and two hired girls be any help to you?"

"Half the quantity will be all sufficient, my dear," she answered.

And Joe told John, as they went up to bed an hour later, that he really did believe Will must have heard their talk in the barn.

But the girl was forthcoming next day, and stayed for many a day, and the baby, not having a tired, over-heated mother, cut its teeth, and speedily grew strong and fat, and the roses and smiles came back to Mrs. Harris' face, and chased the weary look out of her eyes.—U. F. N., in Farm and Fireside.

### The Stolen Cow.

Ben: Perley Poore, who seems to be as good at telling stories about animals as men, tells in an exchange the following remarkable anecdote of a stolen cow:

A man stole a cow from Morristown, N. J., and drove her to Philadelphia for sale. She was a common cow enough except that she had lost her tail but about six inches. The thief, fearing that by the shortness of her tail he might be traced, had procured in some way (probably from some slaughter house) another cow's tail, which he fastened so ingeniously to the short tail that it was not to be known that it had not regularly grown there. As soon as the Jerseyman missed his cow, he set off for Philadelphia, thinking she would probably be carried there for sale; and it happened that when he came to the ferry he got into the same boat that was carrying over his cow and the fellow who stole her. As it was natural that he should have his thoughts very much upon cows, he soon began to look at this one with very great attention. She was indeed very much like his cow, he thought. Her marks agreed wonderfully, and he had exactly the same expression of face, but then the appearance of her tail was so very different.

It must be supposed that the new owner of the cow felt rather uncomfortable during this examination, for he soon saw that this was the person whose property he had stolen, and he was very uneasy lest he should take hold of the tail which he looked at so continually. Upon the whole, he thought it best to divert his attention in some way, if possible, and therefore steps up to him and says, "Neighbor, that is a fine cow of mine, won't you buy her? you seem to know what a good cow is." "Oh, dear me," says the other. "I've just had a cow stolen from me." "Well," says the thief, "I'm sorry to hear they've got to stealing cattle, but I'll sell off, and you could not better replace your loss than by buying this cow; I'll warrant she's as good as yours." "Why," says the Jerseyman, "she was exactly like this one, only that she had no tail to speak of, and if this one had not such a long tail, I'd swear it was my own."

Everybody now began to look at the cow's tail, but the thief stood nearer to it than anybody, and taking hold of it so as to just cover the splicing with his left hand, and with a jack-knife in his right, pointing to the tail, he said: "So if this cow's tail were only this long, you'd swear she was yours." "That I would," says the other, who began to be very much confused at the perfect resemblance of his cow except in this one particular, when the thief, with a sudden cut of the knife, took off the tail just about an inch above the splicing, and throwing it overboard, bloody as it was,

turned to the other and said, "Now swear it's your cow!" The bewilderment of the poor man was now complete; but as he had seen the tail cut off, and saw the blood trickling from it, he could, of course lay no claim to the animal from the shortness of her tail. Indeed, he was proof positive that this was not his cow; so the thief, going over with him, sold him the cow without any further fear of detection.

### A HAPPY OCCASION.

"Do not come too late." That was the wording of the telegram which Captain Richard Irton held in his hand as he sat, in a temperature of 100° in the shade, on the veranda of his Indian bungalow.

"Do not come too late?" he muttered to himself. By Jove, as if it were probable that he would dawdle now! It was just like Mrs. Lennox to send such a chaffing wire as this. He might have been a long time making up his mind, but it was made up now, and he meant to go home and marry her. It was her last letter that had settled the matter—the letter in which she hinted that Lord Shorthorn was awfully "mashed."

No, he wasn't going to stand by and see Dorothy Lennox married to a cad like Shorthorn. He had been a whole year, he reminded himself, in this infernal station with its furnace heat, its insane gossip, and its eternal tennis and polo. How he loathed the very sight of his major's wife, with her white eyelashes, her malicious giggle, and her flirting manners!

And then he thought of Mrs. Lennox. He remembered the first night he had met her—in the ballroom of a great house in London—and how he had seen her surrounded by a dozen other fellows, and how he had "made the running," and had cut out all those outsiders. And he recollected the call he had paid next day at her tiny house in Park street, when she had been so sweet and graceful, and had talked to him as no women had ever talked before. He didn't go in for brains or any of that rot, but, by Jove! Dorothy Lennox made him feel another fellow. He thought of the cool amber-tinted room where she always sat, with its drooping palms, its masses of azaleas, its Rajon etchings, and its blue-and-white Nankin. It was always cool and cosy in Mrs. Lennox's house, and she had a way of taking a fellow's hand and looking him seriously in the eyes which was quite irresistible. He remembered how it had become almost a habit to drop in of an afternoon, to lounge on her soft divan, and listen to her half-chaffing talk and her low delicious laugh. And when a woman is deuced good-looking as well as clever, why what is a fellow to do? Perhaps it was wrong to make love in quite such a serious way as he did, but, hang it! she wasn't a kitten, and she might have known he wasn't the marrying sort.

All that was a year ago, but he hadn't forgotten her a bit—worse luck. And her letters—how awfully nice they were! How like herself! Not spoony, like those she wrote to her; but frank, humorous, and thoroughly bon comrade. Hang it all! it was much easier to keep heart-whole in London than in this sultry and monotonous hole. He had managed to evade compromising himself definitely even when he had gone to bid Mrs. Lennox good-bye, although he had been seriously near proposing to her that last evening; but he had got away, and nothing had been said which would have tied him down to an engagement.

Dick, in his roving life, had committed every folly except that which he considered the hugest folly of all—the folly of tying yourself to one woman for life. He remembered how he had congratulated himself on all this when he went on board the Junna. Was he, the best looking fellow and keenest sportsman in the One Hundred and Fifteenth hussars, to knock under like any spoony young sub, the moment he met a pretty woman? But now things were changed. He had never bargained, somehow, for her marrying again; he had got to look upon her more or less as his own. When she had written that letter with all the allusions to Shorthorn in it, his blood had fairly boiled. He didn't regret a bit the letter he had written in reply, telling her he was leaving India the very day he could get leave, and asking her to be his wife. After all, why shouldn't he marry? He was over 30, and he had, as he remembered with a smile, his "ding." The other fellows in the regiment used to chaff him and call him "casual," and said he never did to-day what he could put off till to-morrow. But that was all nonsense. He could make up his mind like other men, even to matrimony. And here was her answer to his letter: "Do not come too late." Well, he had got his leave and would be with her in three weeks.

Mrs. Lennox was the sort of woman about whom people's tongues are always wagging. Hardly was her late husband borne beneath nodding plumes to Kensal Green than she was married, in perspective, to at least a dozen admirers. She was a great success in society, for besides being a charming woman, she was a fashionable poetess, writing words for Tosti's songs, and publishing small volumes of verse, bound in white parchment, and printed on extra thick paper. Tall and slight, with smooth dark hair and liquid eyes, she had a face full of character and determination. To look at Mrs. Lennox was to know that she was a woman who rapidly made up her mind, and who, once having done so, was not likely to alter it. But two years had passed away since her husband's death, and this nineteenth-century Sappho had not consoled herself.

And then had come the Dick Irton episode. It was a bright morning in June when Captain Irton arrived at Charing Cross station, thoroughly fagged and wearied with his long journey. He had come as fast as P. and O. steamers and mail trains can bring a man from Bombay to the Strand. But in a couple of hours he hoped to have rid himself of all signs of travel, to have got inside a decent coat, and to be in the shady drawing-room in Park street, with Dorothy Lennox's soft arms round his neck. He felt very sleepy and somewhat aggrieved, for he had nursed the unreasonable hope of seeing her at the station, although she could not possibly know exactly when he would arrive. He had started by the very next mail from Bombay, so that writing would have been useless. He felt, indeed, that he had answered her telegram in a very practical fashion. How overjoyed she would be to have him back! He hoped it would not

be too much for her—seeing him suddenly again like this. So, throwing himself on the bed in his room at the Grand hotel, he fell asleep.

When Dick awoke it was three in the afternoon. Tubbing and unpacking took an hour, and then he had to go out and buy a tall hat. After this he directed the cabman to the house in Park street.

The shady Mayfair street looked bright and pleasant as his hansom rattled along, the houses smartened up for the season with new blinds, and window-boxes full of daisies and spirea. A light breeze blew in his face, and a couple of fair-haired girls in pink cotton made a bright patch against the gray-toned houses. By Jove! how awfully nice it all was, after India! A man might be very happy in London, with a charming wife who would know how to give little dinners, and the club, and the theaters, and the park.

Pulling up at the house, Dick's jaw fell. There was an awning from the door to the curbstone, with a crowd of nursemaids andurchins gaping on each side. The street was full of carriages, too. What did it mean? Then Dick remembered that Mrs. Lennox gave a great many afternoon parties. Well, it was deuced disappointing, he said to himself, when you had come all the way from India to see a woman, to find she was giving one of those infernal kiddie-draws the very day you arrived.

Inside the house there was the usual elbowing, well-dressed crowd that you see any afternoon in the season in Mayfair. Boys in gray coats with pink carnations in their buttonholes jogged old club-men in brown coats and white gardenias. In the dining-room, hook-nosed dowagers were foraging for loaves, while on the landing frisky matrons loitered with their temporary swains.

On the stairs Dick met a woman he knew, an enthusiastic girl of forty-three, who was dressed in more juvenile garb than when he had last seen her. "Charming to have you see you back—happy occasion!" she tripped past him.

"Happy occasion, was it?" said Dick to himself, wishing his gushing acquaintance and the rest of the guests at the bottom of the sea. It would have been a happier occasion still if he could have found his Dorothy among them in her amber-tinted room.

When Captain Irton reached the door, he could see Mrs. Lennox standing in the midst of a small crowd of people, who all seemed to be talking at once. By Jove! how "fetching" she looked in her silver-gray gown, with a high bouquet of orchids, and that gray tulle thing she had on her head! Was that a new fashion, Dick wondered, for winking to wear bonnets of their own "at home?" And there was that ass Shorthorn close beside with a particularly fatuous expression on his face! It was high time he had written, Dick thought; it was high time he had come. Why, the fellow was fargone—over head and ears; Dick could see that by the way he appropriated Mrs. Lennox with his eyes.

Then one of the circle moved away, and Dorothy turned and saw Captain Irton at the door. She looked as if she had seen a ghost. Coming forward, he took her hand, and then he saw that something was wrong. Without a word she motioned him into an adjoining room, which for the moment was empty.

"Good God!" she whispered, "why have you come now? I wired that you were not to come, that it was too late. I wrote, too, but you cannot have got my letter."

"Too late, Dorothy, what do you mean? Your telegram said 'Do not come too late.' Well, I started the next day."

"Poor Dick," she said at last, "what a dreadful mistake you have made! 'Do not come.' Too late," was the message I sent. Did you not remember that there are no full-stops in telegraphy? I was married an hour ago to Lord Shorthorn. Come in, and let me introduce you to my husband."

And this was Dick Irton's little mistake. There are no full-stops in telegraphy, but when, ten minutes later, Dick saw Lord and Lady Shorthorn drive off amidst showers of ribbons and slippers, he knew that he had had a moral full-stop which he would remember all his life.

The Birthplace of Abraham.

Not far from Aleppo is situated the little town of Orfah (the ancient Ur of Chaldees), which is of great historical interest, it having been the birthplace of the patriarch Abraham. There are few Jews in this place, but the Arabs still point out a small building lying outside the town, which they declare to be the house wherein Abraham first saw the light, and which they therefore term Beit El-Challil (the house of the friend of God). It is most improbable that the actual house should have stood for thousands of years, but the building in question is of great antiquity. By its present owner, an Arab peasant, as well as the Arabs generally, it is held in the utmost veneration, the more so since it is feared that within a few years it will fall to the ground.

### A Hard Fate.

It is indeed, to always remain in poverty and obscurity; to enterprising, reader, and avoid this. No matter in what part you are located you should write to Hallett & Co., Portland, Maine, and receive free, full particulars about work that you can do and live at home, at a profit of at least \$5 to \$25 and upwards daily. Some have earned over \$50 in a day. All is new. Capital not required. You are started free. Either sex. All ages. Better not delay.

Little Tony, aged eight, asks his little playmate: "How old are you, Lucille?" "I'm six, Tony." "Oh! six years, indeed! Are you quite sure? You women are always making yourselves out to be younger than you are."

Mr. W. Howells has written for The Youth's Companion three charming articles, recording his early life in Ohio. It is his actual experience, not fiction, and it brings out, with many exquisite touches, the life of a boy in a Western log cabin.

HALE'S HONEY is the best Cough Cure, 25c. 5c. GLENN'S SULPHUR SOAP is best and beautiful. 5c. GERMAN CORN REMOVER kills Corns & Bunions. 5c. HILL'S HAIR & WHISKER DYE—Black & Brown. 5c. PIKE'S TOOTHACHE DROPS cure in 1 Minute. 5c. DEAN'S RHEUMATIC PILLS are a sure cure. 5c.

## FIRE AND BRIMSTONE.

### A GLANCE INTO THE INTERIOR OF OLD MOTHER EARTH.

#### The Globe We Live On Very Bad at the Core.

"Talking about earthquakes," said Prof. Van Benthuyssen, "calls to mind a question, which, standing alone, is of startling significance to the people of this continent. It is one that has been under discussion for many years, but I believe that the problem was solved when the shock occurred in 1884. The particular place where that earthquake originated affords little room for speculation. The main fact proved by that shock was directly to the point that the interior of the earth is in a highly-heated state.

"There are no facts to disprove this assumption, but many to support it. If it is not in a fluid condition so largely as to interfere with its rigidity, which is counted equal to a ball of steel, this is said to be because of the great weight with which the exterior presses toward the center. Notwithstanding the facts already mentioned, a cooling process is steadily going on. Geologists claim that it has required twenty-five millions of years to acquire its present external form of solidity, and that during this period the mountains were formed and the hollows of the seas made, by a sort of wrinkling of the surface as the globe of liquid fire and heated gases contracted to its present shape. According to this idea, the solid crust of the earth extends down from ten to forty miles, there being beneath that a greater or less thickness of plastic material, from melted rocks, etc., under high pressure, while the crust of the earth is all the time in a high state of tension from the gradual cooling of the interior, causing cavities and allowing the superincumbent earth to crowd down closer to its heated core."

Another theory propounded by the Professor, and one which admits of very little criticism, is to the effect that the access of water, also by percolation from the earth's surface to these subterranean ovens, it is thought, in some cases cause explosions, dislocating vast quantities of material, and perhaps by opening communication with the still hotter portion yet lower down, be the cause of some of the most destructive volcanoes. These explanations, while being to a small extent hypothetical, accord with all that is known by acknowledged authorities.

Another significant point is that they afford the best theory yet advanced to account for the earthquake which is now agitating the minds of people all over the globe. The geologist, waxing warm to his subject, insisted that we have hardly made a pin-scratch upon the crust of the earth. The further we go down the warmer it is. An illustration of this is supplied in the fact that the artesian wells supplying the city of Paris from a depth of nearly 1,800 feet yield water of 82 degrees Fah., and the lower levels of the comstock mines have an almost uniform temperature of 130 degrees Fah. It is estimated that the heat increases at the rate of one degree for every fifty feet, and this would give a temperature to melt the hardest rocks in less than ten miles.

## MURDERING GUNS.

### STEEL CANNONS WHOSE USE IS TO RIDDLE TORPEDO BOATS.

#### The Part They Will Play in the American Navy.

The October issue of *Harpers Monthly* contains an illustrated article by Admiral Simpson of the American navy that deals with the construction of the steel guns that are to be used to arm the new war ships that Secretary Whitney is going to build. Incidentally the modern machine gun, or quick-firing gun, is mentioned as a "murdering gun," although the article is chiefly devoted to the method of constructing big breech-loaders. A naval officer who talked about these "murdering guns" recently, said:

"One has only to stop to think a moment to appreciate the tremendous advance made in the construction of guns during the present century. Every one is familiar with the fact that a very large number of the privateers that did their country such great service in the last war with England were armed with six-pounders—cannon that threw a ball of cast iron weighing six pounds. These guns were mounted in broadside, much as the nine-inch guns on the big wooden frigates that form the greater part of our navy now are mounted, and it required about five men to serve them well. They were fired perhaps once in five minutes. Although the principle weapon of the little war ships of seventy-five years ago, the six-pounder is now one of the little guns to be used as the flint-lock muskets were used in those days, to repel attacks from small boats and pick men off of exposed parts of an enemy's ship. This latter service gives them the names of murdering guns."

The six-pounder of 1812 was usually a brass piece, and the charge of powder was so small that the balls failed often to penetrate the thick plank of an enemy's ship. It is a fact, that, until within forty years, thick timber in the top sides of a ship was a sufficient protection even against the cannon balls of larger degree. But now the quick-firing six-pounder has become an awful weapon of destruction. Its barrel is made of steel. Instead of being fired by touching a flaming match to the priming in the vent of the gun, as its ancient namesake was, it is fired and loaded as well by the motion of a lever. In place of the loose bag of powder and the round iron ball that loaded the ancient one, a metallic cartridge that is made up of powder fulminate and a long steel bolt is used. The cartridges

are placed in a magazine connected with the gun, and the motion of the lever throws out the empty shell after the discharge, inserts a fresh cartridge, and fires it. The speed attained at a recent trial of the Nordenfett gun at Dartford in England, was six rounds in 14 seconds. It could be easily and accurately fired twenty times in a minute.

"But the speed attained, important as it is, is not the only advantage of these six-pounder quick-firing guns. At the Dartford trial mentioned above, the gun was tested to show its power. Five iron plates, each an inch thick, were used over an appropriate backing of wood to form a target, yet the steel bolts which this gun threw with such marvellous rapidity passed clear through the five inches of iron plates the gun being fired at a distance of sixty yards from the target. That is the sort of a weapon that the thinning shells called torpedo boats have got to face. The little steamers may fly at a speed of twenty-five miles an hour, but unless she can get unobscured within a very short distance of the big man-of-war she seeks to destroy the captains of the top on the masts, and fire the great guns with a range of her with the lightning six-pounders, and before she can travel three times her length will drive such a shower of steel bolts clear through hull, boiler and everything about her that not a soul nor a fragment will be left above water to tell whence she came or mark where she went down. Not even the best of torpedo boats, except through the accident of fog or in



## WHAT BREAKS A MAN UP.

It is not this playing at billiards  
That tires a man to death;  
But it brings a coal from the cellar  
That takes away his last breath.

And it is not the base ball's green pitching  
That will knock him all of a heap;  
But it's seeing a few sticks of green wood  
That'll give him a grave long and deep.

And it's not through the midnight carousal  
That so many give up the stife;  
But it's walking the floor with the baby  
Deprives a poor fellow of life.

## AN OLD-TIMER'S STORY.

HOW THEY USED TO DO ON THE  
LOWER MISSISSIPPI.

The Struggle for Life of One Man Against  
Five Land Pirates, and the Way It  
Ended.

At a down-town hotel the other evening, says the Denver News, there sat smoking a number of men somewhat roughly dressed and well past middle life, and most of them showing that their struggle with life had not been the easiest which is allotted to mortals here below. Among them was an old trapper, who, with Jim Baker, had encountered both grizzlies and Indians by the score, a prospector who had visited every new diggings from San Juan to Fraser River, a freighter or two who had "whacked bulls" from the Missouri to Salt Lake and Virginia City before the advent of the railroads, and several others who had been listening to the strange tales of danger and adventure which a casual meeting had suggested. They had been in many a rush for "new diggings," and in many a "stampede" together, but had never known each other until old age and hard luck had thrown them together in some of the second-class hostilities of the Queen City of the Plains.

The conversation lulled finally, and the trio relapsed into silence, as over their pipes they recalled the recollections of pioneer days, when a tall, lank-looking man, with grizzled locks and an unmistakable southern accent spoke: "I've listened to you fellows' yarn about Indians and grizzlies and vigilantes, and now let me tell you one. It is about an adventure I had down the Mississippi a number of years ago."

"If you have been down the big river, you know that down below Donaldsonville it spreads out over acres and acres of country on each side of the channel. The further down you go the more country you'll find covered by water, and you can find places where a house can be hidden away so nicely that fifty men might search for her a week and not find her. I went down into that country on a venture of my own. I had a small, snug house-boat and \$30 worth of trading cargo, and the idea was to peddle off my stuff to the isolated people along the banks in exchange for furs, and to spend the winter there in hunting and trapping. I took with me my nephew, a boy about eighteen years old, and a couple of good dogs, and reached the spot where I was to tie up for the winter about the first of November. I had pretty good luck in exchanging my goods, and when I tied up there was only about \$15 worth of notions left. In the bend where I proposed to winter the overflow was at least ten miles across, and the place selected was all of three miles from the steamboat channel. The water over the bottom lands was about two feet deep on the level, but here and there were sinks where it was deeper, and there were many islands clear above water. There were panthers, wild cats, coons, foxes, woodchucks and muskrats in plenty, and I was counting on big luck, when something happened to the boy. He went out with one of the dogs to inspect some of the traps, and after a couple of hours, one dog came back alone. The other had been stabbed in two places and had died just before reaching the boat."

It was just at night when he returned, and as I could not get out to search before morning, you can imagine something of my anxiety, and how slowly the hours dragged away. I was off at the first peep of dawn, taking the dog along. After a walk of two miles we came upon the boy's dead body. He'd been shot at by one of the tramps, and by some one who had laid hands on him before the shot was fired. The bullet had gone through his heart, and his rifle, knife and other effects had been taken away. Pinned to his clothing was a piece of paper, on which was scrawled: "If you don't leave within two days we'll serve you the same." It was the work of some of the renegades who made that region their permanent home. I was completely knocked out for an hour or so, but then I braced up and vowed vengeance. Law could not reach these men. I buried the body, and then returned to my boat, feeling pretty certain that the men who had done for the boy would soon pay me a visit. I had a rifle, a shotgun and a navy revolver, and the boathouse windows were provided with loop-holed shutters. Once shut in no one could get me out unless I was driven out by flames.

It was just before noon the next day when I heard from the expected visitors. They were keeping very shady, knowing they would shoot me on sight, when I saw men pulling a skiff up the channel. There were three whites and two blacks, and if my dog had not given them warning, I should certainly have shot one of them before halting. The voice of the dog drove them to cover on an island about pistol shot away, and from there they hailed me and wanted to know what I was going to do. I lied then, and pretty soon they opened fire on the boat. The only alarm I felt was that they would reach to board me. In that case five to one was too many. After they had fired thirty-one shots, all of which were harmless to me, I got a bead on one of the blacks and knocked him over.

Their plan was then abandoned for another. By the use of their boat they could work all around me, and by and by they had four men posted at different points, and the leader called out that they would remain all winter but that they would have my life. They were close enough to command some of the loop-holes, and each one kept himself so well sheltered that I did not get a shot the whole afternoon. As night came on I made ready for a different attack. I heated the stove-burner full of water, placed pails handy and made a barricade across the boat's cabin with furniture. The boat lay in such a position that they could only reach me by making use of their skiff, and then only at the stern. The bow was in the water too deep to wade in, and too full of roots and canes for a boat to pass through.

It was near midnight when the growling of the dog proved that some devilry was on foot. I dipped out a pail of boiling water, had the shotgun and revolver ready, and pretty soon I realized that the quartette had landed on the stern. All of a sudden I flung the door open. Two of them stood there, and as I wished the water over them they went overboard, yelling as they had been skinned with a knife. The two others had gone forward, one on each side of the boat. They had revolvers, and they turned and opened on me, and the three of us emptied our shooters without any one being harmed. As I dashed into the cabin after my shotgun they followed me. They were so close to me that I could not get the gun, but had to draw my knife. It was dark in there, and the dog took a hand in, and I expect that little shindy has never been matched. We cut, hacked, thrust and used our fists and feet. I got two cuts almost at the beginning, but at the end of five minutes one fellow was lying in a heap and the other began for quarter. I struck a light and found the one dead and the other bleeding like a hog, with the dog hold of him. I was in a mood to finish him at once, but he begged so hard that I let up on him, only to see him die a couple of hours later. In the darkness I think the fellows must have fallen off of each other by mistake, for one had four knife wounds and the other six. I had two, as I said, and the dog had three or four skin cuts. When I got around to look for the other, whom I had scalded they were out of the way, and I never bothered them again. I got three rifles, two revolvers, two knives and \$63 in money out of the fight, and the loss of my nephew cost three lives.

## BALD HEADS.

Fully 30 Per Cent. of the Men in Eastern Cities are Bald.

To a person who has a moderately well-supplied pocketbook and a thoughtful turn of mind there can be no more fruitful theme for meditation than to go into our large halls, theaters, churches and other places of public resort, and securing a seat in the gallery or the rear part of the room, look at the heads of the audience for actual baldness. Unless the experimenter has been in the habit of counting for this object, he will be surprised to learn that in most of the Eastern cities fully 30 per cent. of the men more than 30 years of age show unmistakable signs of baldness, while nearly 20 per cent. have spots on their heads that are not only bald, but actually polished with the gloss that is supposed to be found to extreme old age alone. I have been in the majority of the churches and theaters in all the large Eastern cities, as well as in Chicago, St. Louis and other places of the West, and have verified my assertion by actual count. From my observation I find that bald-headed men are most plentiful in New York and Boston: After these come Philadelphia, Washington, and the Western towns. I say "men" for two reasons: 1. Because women usually wear their hats or bonnets on such occasions, thus covering their crowns. 2. In case their hats are removed the hair is combed so as to cover any possible bald spot, or else there is an artificial "switch" to hide the defects of nature. So, without indulging in any speculations regarding what may be, I will confine myself to what is to be seen.

Here are a few observations taken in Boston: Trinity Church, 543 men; 71 actually bald and 45 indications of baldness. King's Chapel, 88 men; 38 actually bald and 14 indications of baldness. Hollis-street Theater, orchestra at performance of the "Mikado," 63 men; 27 actually bald and 10 indications. Boston Theatre, Judic, 126 men; 51 actually bald and 43 indications.—Popular Science Monthly.

## Senator Ransom's Constituents.

Senator Matt Ransom is noted among other things for his remarkably long and stiff shirt cuffs, and for his inability to keep up a correspondence. He will not, he cannot, he says, answer letters. When Senator Vance was Governor the second time, Ransom was serving his first term in the Senate. It was necessary to get his official signature to a document, and the Governor wrote and wrote, but could get no answer from Ransom. He was obliged finally to send a messenger to the Senator, and when the Governor and Senator met shortly after in Raleigh, Vance took Ransom to task, but the Senator only laughed, and it is impossible for any one to get vexed with Ransom. A few minutes later the Senator met a constituent from a rural district, a hayseed constituent, with long hair, tangled beard, and blue jean trousers. The Senator greeted him like a long-lost brother, held both hands, asked after the wife and children, and invited the constituent to come to his house and take dinner any time.

"Matt," said the man, rather soberly. "I've been layin' it up agin you, because you didn't answer none of my letters. Reckoned you might have got a little too high toned. 'Twant like you, Matt, but I couldn't just come to any other conclusion."

"Why, bless you," replied Ransom with overflowing good nature. "I know I didn't. I've been too busy. Why, only just now the Governor was scolding me for not answering his letters, and if I couldn't find time to write to you, he couldn't expect I was going to be able to write to him."

Was ever more adept rubbing of the fur the right way? And the man went home to the rural district conscious that he was a man of far more consequence in Ransom's eyes than the Governor. No wonder Ransom's grip on his State is so great that he doesn't need to write letters.

## Imagination and Sickness.

Two young girls were at dinner at their home in Marseilles, when they were told that a special friend of theirs had died the previous night, of cholera. At once they became very nervous, and left the table precipitately, ordered a cab and told the driver to take them as fast as possible to the town of Aix, some distance from Marseilles. When the cab got outside the city, the coachman looked through the window to ask the address of the place to which he was to go. He saw one of the girls in convulsions and the other utterly unconscious. In his turn, the driver got frightened, abandoned the cab, and ran about like a madman. When the police, who were sent for, arrived and opened the cab, they found one girl dead and the other dying. A little way up the road they found the coachman lying on his face, dead.

## HENRY COLERIDGE.

His Celebrity as an Eloquent Soliloquist and Author.

Henry Coleridge calls his celebrated uncle "the eloquent center of all companies, and the standard of intellectual greatness to hundreds of affectionate disciples, far and near," and says, "a day with him was a Sabbath past expression deep and tranquil and serene. Throughout a long drawn summer day would this man talk to you in low, equable, but clear and musical tones, marshalling all history, harmonizing all experiment, pouring such floods of light on your mind, that you might like Paul, become blind in the very act of conversion. In all this he was your teacher and guide, but in a little while you might forget that he was other than a fellow student, a companion, so playful was his manner, so simple his language, so affectionate the glance of his pleasant eye." De Quincy says, "Coleridge led me at once to the drawing-room, rang the bell for refreshments, and omitted no point of courteous reticence. That point being settled, Coleridge—like some great Orator, or the St. Lawrence, that, having been checked and fretted by rocks or thwarting islands, suddenly recovers its volume of waters and its mighty music—swept at once, as if returning to his natural eloquence, into a continuous strain of eloquent dissertation, the most novel and illuminated that it was possible to conceive."

Now these are the reports of enthusiastic young disciples, and must be taken *cum grano salis*. But there is little difference in reports of older men. "His society," says Wordsworth, "I found an invaluable blessing, and to him I looked up with equal reverence as a poet, a philosopher and a man." Carlyle, who never praised a living man, is the only one who does not speak in terms of enthusiastic reverence and acknowledge the effect of a new vitalizing mental force.

## Why People Were Buried.

When people began to bury their dead they did so in the firm belief in another life, which life was regarded as the exact counterpart of this present one. The unsophisticated savage, holding that in that equal sky his faithful dog would bear him company, naturally enough had the dog in question killed and buried with him, in order that it might follow him to the happy hunting ground. Clearly, you can't hunt without your arrows and tomahawk; so the flint weapons and trusty bow accompanied their owner to his new dwelling place. The wooden haft, the deer sinew bowstring, the perishable articles of food and drink, have long since decayed within the damp tumulus; but the harder stone and earthenware articles have survived till now, to tell the story of their crude and simple early faith. Very crude and illogical, indeed, it was, however, for it is quite clear that the actual body of the dead man was thought of as persisting in a sort of underground life. A stone hut was constructed for its use, real weapons and implements were left by its side, and slaves and wives were ruthlessly massacred, as still in Ashantee, in order that their bodies might accompany the corpse of the buried master to his subterranean dwelling. In all this we have clear evidence of a very inconsistent, savage, materialistic belief, not indeed in the immortality of the soul, but in the continued underground life of the body.

## Brian Boru.

Brian Boru, or Boromho, is said to have been the son of Kennedy, King of Munster, Ireland. The story goes that his first warlike exploits were performed under the banner of his brother, the King of Cashel. After his brother's assassination he became King of Munster, and as such compelled the Danes of Dublin to pay tribute. He was engaged in a long and finally successful war against Malachy, the King of Tara, and his nominal over lord. In the end

he was acknowledged as lord even by the O'Neils, and Malachy, their chief, followed in his train as an under king. The whole island had now submitted to him, but the Danes made an effort to re-establish their supremacy. Leinster joined the Osmen, but they were overthrown by Brian in twenty-five battles, and finally, at Clontarf, in 1014, Brian, who is said to have been eighty-three years of age, did not command in person, but remained in his tent, where, after the victory had been won, he was killed. Tradition makes Armagh his burial place. Brian Boru must be regarded as the popular hero of early Irish history, and the stories told about his reign led to its being regarded as a sort of golden age. The O'Briens and many other distinguished Irish families claim him as their ancestor.

## THE WILD MAN OF OHIO.

A Curious Creature Seen Among the Hills of Holmes County.

A party of hunters, who have just returned from a hunt in the hills of Holmes County, Ohio, say they encountered a curious creature on their trip. According to their description, a wild man, or some other strange being, is at large in Holmes County. The party who report seeing this strange creature claim that he or it looked like a man, but acted like a wild beast. The creature was encountered near a brushy thicket and willow copse near what is known as Big Spring, where General Buell rested on his march through Ohio, at a point a short distance south of the Wayne County line in Holmes County. The hunters were beating the brush for pheasants when the attention of one of the party was attracted to an object that suddenly darted across an opening in the brush. Later on the object was again seen along the edge of the brush. By this time the hunters had reached open ground, and were surprised to see what they describe as a man, entirely nude, but covered with what appeared to them to be matted hair. When seen he was some distance away, but on discovering the hunters he started toward them on a run, and gave forth queer guttural sounds. On seeing the strange being moving toward them the party of hunters, which included four persons, all armed with shot guns, broke and ran. The strange creature pursued them for a short distance until the party had reached a public highway, when he turned back and was seen to enter Killbuck Creek, which he swam, and then disappeared in the brush again. On approaching the water he dropped on all fours and plunged in like a dog, swimming in a manner similar to a canine. The hunters did not have the nerve to return, but got away from the place as soon as possible. They are emphatic in their assertion that they encountered a wild man and describe him as above, but they are of the impression that he is no relative of the famous wild man of Rockaway.

## Good Water.

Good water should be tasteless and odorless when either fresh or stale. After long standing it should show no sediment. If, when boiled, it turns white, it contains lime; brown, iron, clay or vegetable matter. If after long standing it has a slight moldy smell, it has passed through marshy land and contains germs and organic substances. All such water should be carefully avoided.

## Some Big Figures.

A mathematical calculation which is just old enough to make interesting Sunday reading once more is based on the following passage from the Book of Revelation: "And he measured the city with the reed 12,000 furlongs. The length and the breadth and the height of it are equal." This pretty little calculation, which is being freshly quoted, is as follows: "Twelve thousand furlongs, 7,920,000 feet, being cubed, 1,496,798,000,000,000 cubic feet. Half of this will be reserved for the throne of God and the court of heaven, and half the balance for streets, leaving a remainder of 124,168,472,000,000,000 cubic feet. Divide this by 4,066, the cubic feet in a room sixteen feet square, and there will be 30,321,823,750,000,000 rooms. We will now suppose that the world always did and always will contain 900,000,000 inhabitants, and that a generation lasts for thirty-three and one-third years, making in all 2,970,000,000 every century, and that the world will stand 100,000 years, or 1,000 centuries, making in all, 2,970,000,000,000 inhabitants. Then suppose there were 100 worlds equal to this in number of inhabitants and duration of years, making a total of 297,000,000,000,000 persons, and there would be more than 100 rooms sixteen feet square for each person."

## Mrs. Cleveland's Drive.

Mrs. Cleveland takes advantage of the weather for driving, and none cares more to enjoy it than she. Every afternoon the carriage is ordered, and Mrs. Cleveland has some lady friend to go with her. The ladies tell the coachman to drive them out into the country where they can see the beautiful trees turning to autumn colors. Mr. Cleveland does not care particularly about looking at the change of colors in the leaves, but sometimes he is prevailed upon to go. Very often Mrs. Folsom accompanies her daughter, sometimes little May Cadmusch, Mrs. Folsom's little niece, occupies the front seat, but it is rarely that Hector is invited. Hector is not such a favorite with his mistress, as every one would have you to suppose. He would much rather be in the kitchen, or in the pantry with Sinclair, than acting propriety upstairs. Hector gets his morning out in the White House market wagon, the butcher's. Hector enjoys this riding much better than he does the lone drives with his mistress.

## VARIETIES.

THE DOCTOR GOT THERE.—A week or two ago Bill Higgins, Frank Rhoads, Arthur Miller and others were engaged in conversation on Second and J Streets, and, straggled enough, the talk was of monumental literature they had met. Rhoads had just finished relating a whopping story he had heard, when Arthur Miller observed Dr. Blucher Morrison slowly perambulating down J Street, and remarked: "Talk about your boss exaggerators, here comes one who is no slouch; when the doctor gets here I will tell a whopper, and then observe with what ease and grace he knocks me silly." When the doctor came up Miller turned to Higgins and said: "You talk about his being hot here, why it ain't a circumstance; I remember being in the southern part of this State once when it was so hot that a poker game they had to use small wooden racks in pulling in the coin, and finally, the coin got so infernal hot that they couldn't touch it at all, and had to substitute ivory chips." "That was pretty darned hot," remarked the doctor, who had listened attentively to Miller's story, "and it reminds me of a spell we had once on the Missouri River, which was the hottest season I ever saw. I was working at a camp in a kitchen made of rough boards, and we used to hang the tinware on nails driven into the wall; one day it got so hot that the solder in the vessels all melted, the tin fell to the floor, and there was not a doggone thing left hanging on the nails except the wires which had been in the hands of the tins.—Sacramento Bee.

SOMETHING OF A STORY.—As an illustration of the "colossal liar" of the West, General McCook relates the following: He was traveling among the Rocky Mountains, and staying one morning from the trail, stood for a moment entranced by the magnificent landscape spread before him, when he was aroused from his meditation by the footsteps of one of the guides who had followed him lest he should lose his way.

"Is not this magnificent, Bill?" exclaimed the General, anxious to share his delight. "It's mighty pretty, General," said the guide, "but I kin show you bigger sights nor this. One time Kansas Jim and me had been trampin' three days and nights, and we came to a plain, and right in the midst of it was a forest all turned to solid stum!"

The General smiled and remarked:

"I have heard of petrified trees before, Bill."

The guide expectorated without changing countenance and continued: "But that warn't all, General; there war a buffalo on that plain and he war petrified on the clean jump, and his hufs had kicked up a bit of sod, and I'm blamed if that ain't petrified in the air!" The General turned an amused countenance on the narrator and said:

"Why, Bill, the sod would have fallen to the ground by the force of gravity."

Without any hesitation Bill answered:

"Well, by—General, the gravity war petrified, too!"—Boston Commercial Bulletin.

HIS PASSING OBSERVATION.—As the train slowed up at a station, a commercial-looking man, who had been noticed in earnest conversation with another party of the same general appearance, was heard to remark: "Smart! He's the smartest drummer you ever met anywhere. Why, he's smart enough to sell suspenders to a dog."

The other commercial-looking man nodded his head at this very happy illustration, and everybody thought the conversation was ended, when a lonesome-looking individual on the opposite side of the car remarked:

"It doesn't take a very smart man to sell suspenders to a dog."

Even the sleepy passengers aroused at this startling remark by the lonesome-looking individual, and the commercial man asked in some surprise:

"Why not?"

"Because it doesn't."

"To keep up his pants," softly murmured the lonesome-looking individual, gazing out across the moon-swept waste, with a far-away look in his voice.

And the astonished brakeman sighed so loud as to crack every lamp chimney in the car.

## WHAT WAS FOUND IN THE TROUT.

A drummer for an eastern house set amid a group of colleagues who were admiring his veracious style of spinning "calkers," when one of the gang said: "Tell us a fish yarn, Bob." "I'll go ye," said Bob, and forthwith he commenced: "I took my vacation last week, and I came across President Cleveland, who was fishing in the Adirondacks. I invited myself to become one of the party, and had a good time. While we were throwing flies in the pools Grover dropped his seal ring in the water. He took it easy, as though he never expected to see it again. About half an hour later we hooked a fine large trout, which, when he was landed, was cut open, and what do you think was found in him? 'Here! here!' the crowd exclaimed; 'somebody pull the chestnut ball.' 'You can't pull any balls on me unless you guess what was in the trout.' 'Spring something new, Bob; the ring story is too old.' 'I have said nothing about the ring; when the trout was opened we found the New York base ball club hiding from the Chicago.'—National Weekly.

A DOUBLE SURPRISE.—"What do you mean by using such violence toward your wife?" asked the Austin Recorder of Sam Johnson. "I didn't use no violence, boss." "But you did; her face is all swollen up from the blow; didn't you strike her?" "Yes, boss, but, heaps, yer see, I was at de gate, and was gwinter gwolow down town, an' I jess kissed my han' ter Matilda." "Kissed your hand to her?" "Yes, boss, kissed my han' ter her; but owing to the defece' in my eyes, I sposed she was mor' a twenty feet off, but she wasn't; she was so close ter me dat de back of my han' hit her smack in de mouf; I never was so gwinter gwolow down town, an' I jess kissed my han' ter Matilda." "Well, there is another surprise in store for you. You pay \$20 and costs or go to the county jail."

HENRY CARVE, a cousin to Queen Elizabeth after having enjoyed Her Majesty's favor for several years, lost it in this manner. As he was walking in the garden of the palace under the Queen's window, she asked him in a jocular manner: "What does a man think when he is thinking of nothing?" The answer was a brief one: "Upon a woman's promise," he replied. "Well done, cousin," said Elizabeth; "excellent!" Some time after he so, lifted the honor of a peerage, and reminded the Queen that she had promised it to him. "True," said Her Majesty; "but that was a woman's promise."

CERTAIN TO CHARM.—Pretty Girl—"An old woman told me to-day that I ought to get some love powder, and she said she guessed you kept it." Drugist—"You can make it yourself by mixing half a teaspoonful of sugar with a minute quantity of powdered starch." "Yes, and how will I give it to him?" "You must invite him to a supper which you prepare, and slip it into his coffee."

Will it make him want to marry me?" "It will if the coffee is good and everything else well cooked."—Omaha World.

"What kind of a cake do you call that?" asked a young husband at the ten-table. "Sponge cake, my darling, and I made it myself," replied his wife. "Sponge cake, is it?" "Yes; what kind of cake did you think it was?" "I thought it might be stomach cake." "You are real mean, so you are."

## Chaff.

The wind is always blowing about something; but there is nothing in it. "Waiter, there is a button in this soup." "Well, it's all the bone the cook had to-day to make soup of."

It costs \$10,000 to convert a South Sea cannibal to Christianity, and then he is only worth \$5 a week in a dime show.

"There comes the press gang," remarked the old gentleman as the regular suitors of his four daughters ascended the steps.

A genius in Troy has invented a stove that saves three-quarters of the wood, while the ashes it makes pays for the remainder.

"Waiter, is this an old or new herring that you brought me?" "Can't you tell?" "No." "Well, then, what difference does it make?"

Weeping Widow—And such a good man, sir! Busy Undertaker—No doubt, no doubt; but a little wide—a little wide for the average man.

In what profession is the greatest amount of ill-temper displayed? The medical; for the reason that the doctors so often "get out of patients."

A Denver paper devotes 24 columns of space to a negro murderer who was hanged there last week. The sheriff let him off with a single line.

An enterprising firm is making a small fortune by sending a receipt to prevent hydrophobia. It is very simple: "Keep out of the dog's way."

The Boston Transcript tells of a spinster in that town who she wants to get married because the Bible says that "there is none good, no one."

"Papa," said a little five-year-old, pointing to a turkey gobbler, strutting around in a neighbor's yard, "ain't that red-nosed chicken got a awful big hooter?"

A Syracuse son-in-law says his wife's mother-in-law is an angel. This does not seem strange when the fact is known that she has been dead several years.

"Sis," said a bright young to his sister, who was putting the finishing touches on her toilet, "you ought to marry a burglar—you have the false locks and he has the false keys."

An exchange says: "A young lady writes to inquire how long a young gentleman should be acquainted with her before she allowed him to kiss her. Long enough for the father and big brother to have gone to bed."

Homes are like harps, of which one is finely carved and bright with gliding, but ill-tuned, and jarring the air with discords, while another is old and plain and worn, but from its chords float strains that are a feast of music.

"What sort of soup is this?" said a gentleman in an up-town boarding-house the other day to a waiter. "Why that's bean soup," was the reply. "Well, I know it has been bean soup, but what the deuce sort of soup is it now?" queried the interrogator.

Gets Left.—"I can say one thing in favor of Mr. Featherly," remarked Mrs. Hendricks, the landlady, "he never takes any kind of bread on the plate." "No, indeed," Mrs. Hendricks, assented Dumly, cordially, "Featherly ain't quick enough."

First Small Boy (triumphantly)—You didn't go swimmin' like us. You ain't had no fun! Second Small Boy (fuming)—I reckon if I turn my shirt inside out and wet my hair under the hydrant I can get a licking just the same as you will when you get home.

Junior Alley, reading a fashion item that "great latitude is allowed in coat sleeves," remarked with a far-away look in his eyes: "I am glad to know that I am in the fashion, as I allow my coat sleeves great latitude when I am alone with my best girl."

"The car is full of alumni," whispered Miss Reckonstreet to her friend from the West as they both journeyed Cambridge in the horse car. "Yes," said the Chicago girl, "and you'll choke one up, don't you? I wonder they do not open the ventilators."

A basting machine capable of doing the work of 15 girls, is being experimented with in this city, but no one has yet invented a basting machine capable of doing the work of one mother and one slipper upon the boy who "hooks away from us in swimming."

Sampson performed great wonders, one of which consisted in lifting the gates of Gaza. Sampson never tried to lift a mortgage, or raise a Grant monument fund in New York. Sampson knew well enough that it was better to connive his efforts to something easy.

Mr. Mann-Hutton—Do you know Miss Beaconsfield, that you are the exact opposite of the accepted type of Boston girl? Miss Beaconsfield—Indeed! and pray what is the accepted type of Boston girls? Mr. M.H.—Oh, all intellect and no style, don't you know?

Mr. Patron says: "If Andrew Jackson heard a lamb bleat in the night he would get up and see to it." Oh, well, we know a man right here in Detroit, who is so tender-hearted that if he hears a kitten, even an infant old kitten, mew in the night, he will get up and look after it with a gun.

"More labor troubles," sighed Costigan, putting on his coat, "more labor troubles; when will the laboring man in this land have peace and his honest rights? 'What's the matter,' asked his wife, 'another lockout?'" "No," said the laborer, wearily, "the boss has yielded, and I have got to go to work again."

Sick Headache.—Thousands who have suffered intensely with sick headache say that Hood's Sarsaparilla has completely cured them. One gentleman thus relieved writes: "Hood's Sarsaparilla is worth its weight in gold." Sold by all druggists. 100 doses \$1.

## NEW ADVERTISEMENTS.

STATE OF MICHIGAN.—In the Circuit Court for the County of Wayne, in Chancery. William N. Carlisle vs. Ellen Carlisle. Defendant in the above entitled cause, Ellen Carlisle, residing out of the State of Michigan and in one of the United States Territories, and an action of Divorcement, do hereby certify that the Complaint, it is ordered that the said Defendant do appear and answer the bill of complaint filed in said cause within five months from the date of this order, also the said bill of complaint be taken as confessed. And further that this order be published within thirty days from this date in the MICHIGAN FARMER, a newspaper printed and published in the said County of Wayne, and be published therein once in each week for six weeks in succession; such publication, however, shall not be necessary in case a default be entered on the said defendant personally at least twenty days before the time last aforesaid for answer appears.

Dated this 22d day of October, A. D. 1886. WILLIAM JENNISON, Circuit Judge. A true copy. Attest: JOHN MARSHALL, Deputy Register.

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